SOUTHAMPTON

URBAN SANITARY AUTHORITY.

THE

TWENTIETH ANNUAL REPORT

ON THE

Vital Statistics and Sanitary Condition

OF THE

BOROUGH OF SOUTHAMPTON,

For the Year 1893.

BY

A. WELLESLEY HARRIS,

M.R.C.S. Eng., L.S.A., D.P.H., &c.,

Medical Officer of Health to the Borough and Port of Southampton; Medical Officer to the Southampton Fever Hospital.

SOUTHAMPTON:
Printed by the Proprietors of the "Hampshire Independent" and "Southern Echo."

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TO THE MAYOR, ALDERMEN, AND COUNCILLORS
OF THE
CORPORATION OF SOUTHAMPTON.

Gentlemen,—

I have the honour to present to you the Twentieth Annual Report of the Medical Officer of Health for the Borough, as required by the Regulations of the Local Government Board.

This Report contains much detailed matter which, I venture to suggest, is worthy of earnest consideration by all who are interested in the sanitary welfare of the Town, showing, as it does, improvements that have already been effected in House Drainage, the surroundings of Workshops, and in carrying into effect generally the Provisions of the Public Health Act, the Infectious Diseases Notification Act, the Public Health (Amendment) Act, the Infectious Diseases Prevention Act, the Housing of the Working Classes Act, the Food and Drugs Act, the Factories and Workshops Acts, and the Cowshed and Milkshops Orders.

In regard to the last of these matters I wish to draw your attention to the need of such Regulations as are suggested in this Report, in order to improve the sanitary conditions under which Milk is still stored and sold.

I also ask your special attention to the necessity for improving the system of drainage in connection with the Platform and Belvidere Sewer outlets.

Although little is said in this Report concerning the Housing of the Working Classes, I regard the subject as none the less important on that account, and would only remind you that it was fully dealt with in my Special Report, furnished under your order, at the close of the year 1893.

Taking the present Report as a whole I think I may fairly state it proves that the Health condition of Southampton is satisfactory, though an improvement may, without doubt, be effected, if the defects to which I have called attention were remedied.

I am, Gentlemen,

Your obedient servant,

A. WELLESLEY HARRIS,
Medical Officer of Health.

Municipal Offices,
Southampton,
February 14*th,* 1894.

PART I.

VITAL STATISTICS.

HEALTH COMMITTEE.

WILLIAM BONE, J.P., MAYOR, Chairman.

MR. T. WALTON, Deputy-Chairman.

Mr. E. Gayton
,, H. Glasspool (Jr.-Bailiff)
,, W. H. Mitchell
,, H. M. Gilbert

Mr. F. H. Candy, J.P.
,, G. Watson
,, J. White
,, C. Brazier

By the Order of the Local Government Board, dated March 23, 1891, Article 18, Section 14, it is prescribed that the Medical Officer of Health shall " prepare an Annual Report, to be made to the " end of December in each year, comprising a summary of the " action taken during the year for preventing the spread of " disease, and an account of the sanitary state of his district " generally at the end of the year. The report shall also contain " an account of the inquiries which he has made as to conditions " injurious to health existing in his district, and of the proceedings " in which he has taken part or advised under the Public Health " Act, 1875, so far as such proceedings relate to those conditions; " and also an account of the supervision exercised by him, or on " his advice, for sanitary purposes over places and houses that " Sanitary Authorities have power to regulate, with the nature " and results of any proceedings which may have been so required " and taken in respect of the same during the year. It shall also " record the action taken by him or on his advice, during the " year in regard to offensive trades and to factories and " workshops. The report shall also contain tabular statements " (on forms to be supplied by the Local Government Board, or " to the like effect), of the sickness and mortality within the " district, classified according to diseases, ages, and localities."

PART I.

VITAL STATISTICS.

Estimated Population, middle of 1893; 66,774. Area, 2,004 acres. Density of Population, 33·3 persons per acre.

Number of Inhabited Houses in the Borough, 1893, 13,355.

MUNICIPAL BOROUGH.

BIRTHS.

Year.	*Males.*	*Females.*	*Total.*	*Birth Rate.*
1891	1069	976	2045	31·51
1892	988	923	1911	29·12
1893	1018	997	2015	30·17

DEATHS.

Year.	*Males.*	*Females.*	*Total.*	*Death Rate.*
1891	614	577	1191	18·35
1892	723	743	1466	22·34
1893	704	666	1370	19·96*

DEATHS FOR THE QUARTERS.

	1892	**1893**		**1892**	**1893**
First Quarter	542	380	Third Quarter	306	351
Second ,,	315	299	Fourth ,,	303	340

TYTHING OF PORTSWOOD.

BIRTHS.

Year.	*Males.*	*Females.*	*Total.*	*Birth Rate.*
1891	164	141	305	30·93
1892	145	127	272	26·27
1893	161	150	311	29·23

DEATHS.

Year.	*Males.*	*Females.*	*Total.*	*Death Rate.*
1891	64	58	122	12·37
1892	83	86	169	16·32
1893	64	76	140	13·15

* Corrected Death Rate.

POPULATION.

The estimated Population has been calculated to the middle of 1893, and is given at 66,774 for the entire Borough.

So much fresh labour has been brought into the Town, by reason of the great works under construction at the Docks, and by the advent of important shipping lines, that many additional families have come to reside here. The above calculations are, perhaps, somewhat under estimated, it being exceedingly difficult to find what the true increase is owing to sudden immigration, which is proved by the difficulty now experienced to procure house-accommodation, as compared with last year.

Every effort however has been made in calculating the Population upon recognised principles, to arrive at a fair and correct estimate.

The Population of the Town proper is estimated at 56,134, and that of Portswood at 10,640.

BIRTHS.

The Births registered in the Borough during the year 1893, amounted to 1,018 males, and 997 females, giving a total of 2,015 (against 1,911 in the previous year), producing a birth-rate of 30·17 per 1,000 of the Population. Average Birth-rate, 10 years, 30·27.

The Birth-rate for the whole of England and Wales for the year 1893, equalled 30·8 per 1,000.

DEATHS.

The number of Deaths at all ages registered in the Borough for the year 1893, was 1370, 704 males and 666 females, showing a decrease of 96 compared with 1892.

Of the total in 1893, 208 occurred in public Institutions viz.: 117 at the Workhouse, 83 at the Infirmary, and 8 at the Fever Hospital.

Thirty-seven of the total Deaths occurred among persons belonging to outside Districts, and in the calculation of the death-rate these have been deducted from the total registered to obtain a corrected death-rate.

AGE DISTRIBUTION.

The greatest number of deaths, 401, occurred among persons between the ages of 25 and 60; 366 were at the age of 60 and over; 317 under one year; 167 between the ages of one and five.

DEATH RATE.

The rate of mortality for the year was 19.96 per thousand of the Population living at all ages, showing a diminution of 2·38 per thousand compared with 1892.

SEX.

The increased number of deaths among the male portion of the community in proportion to the female is accounted for by the greater variety and consequent risk of the occupation of the men, and their greater exposure to climatic changes.

ANALYSIS OF DEATHS IN RELATION TO THE SEVERAL CAUSES.

Small Pox.—Nine deaths occurred from this disease, two of which cases came from outside districts.

Measles.—Forty-five deaths were registered, compared with eight in the previous year. A serious outbreak of this disease occurred during the spring.

I have little doubt that had this been a notifiable disease, and if steps had been taken to isolate the first cases, the outbreak might have been checked at its beginning, and the consequent serious mortality prevented to a great extent. With our present accommodation for the isolation of infectious disease, the cases could not have been isolated owing to the Hospital at this time being wholly devoted to the treatment of small pox.

The large number of deaths from measles shows the severe form the outbreak assumed, and the necessity that exists for a Local Authority being fully equipped to deal immediately with any infectious disease, and so possibly prevent a deplorable sacrifice of human life.

DIARRHŒA. — This disease asserted itself during the Autumn, and was prevalent throughout England and Wales, some districts suffering very severly, 28,775 deaths were registered from this disease alone.

In Southampton the disease was confined to young children. Forty-seven of the fatal cases were amongst children under one year; the remaining seven were under five years of age

PHTHISIS.—This disease was the cause of 102 deaths. The malady is greatly influenced by the Sanitary surroundings of the Patient, and the ability, or otherwise to obtain proper nourishment. Consequently it is more common in crowded damp and badly ventilated districts, and among the poor. The effect of these conditions will be proved on referring to the Street Lists of Disease, given in this Report, in which it is shown that the mortality from Phthisis occurs chiefly in those insanitary neighbourhoods, which I have had occasion to bring under the notice of the Authority in a Report on the Housing of the Working Classes.

It cannot be too widely known that Phthisis is infectious, but the danger of spreading the disease may, by simple rules (given below) on the part of the sufferer, be minimised to almost *nil.* The material containing the infective bacilli (or germs) is the expectoration of the patient, this especially amongst those of dirty habits, is ejected on the floors of the their dwelling rooms, in public vehicles, such as trains, or, with more particular persons, into rags or handkerchiefs.

This material dries and powders up, and is distributed as dust, which is inhaled by other persons. The germs finding a suitable soil develop and reproduce the disease, and that almost entirely through the carelessness of those persons who, already are unfortunately suffering from it. Spit cups, containing an efficient antiseptic should be used indoors, and pocket spit flasks, containing similar material are made sufficiently small to be carried in the pocket for outdoor use. All rags, handkerchiefs, or cloth, if used to receive expectoration, should be afterwards burnt, and the habit of spitting on floors, either in private or public places cannot be too quickly discontinued. The importance of these facts are being well recognised, and I am correct, I think, in stating that the head of a Government department has issued instructions that any of the employes suffering from Phthisis, shall carry out a series of precautions, laid down somewhat on the lines I have above referred to, in the interests of their own friends, and of the Public generally.

Phthisis is generally a slow, lingering disease, and 102 deaths being registered shows that the total number of persons suffering is great, and this shows the greater necessity there is for such rules as I have spoken of above being followed.

CANCER.—Sixty-one deaths were due to this disease showing an increase of 15 over the previous year.

OLD AGE.—Sixty-eight deaths are recorded the majority being between the ages of 70 and 80 years.

PREMATURE BIRTHS.—The number being 48 shows an increase of 9 over the previous year.

DISEASES OF THE BRAIN. APOPLEXY.—One hundred deaths were recorded. This is a large number. Nearly all were registered as from apoplexy, and occurred chiefly among the poorer class.

HEART DISEASE.—Under this heading we have 98 deaths.

BRONCHITIS, PNEUMONIA, AND PLEURISY.—These lung diseases were responsible for 245 deaths compared with 346 in 1892 but although the figure is lower by 101 than in the previous year it is still high. 127 deaths of this total were of males and 118 females the difference no doubt being due as I have already suggested to the greater exposure men necessarily run.

Influenza.—This disease, which was very fatal in this district in 1892, was again prevalent in the town during last year, but in a slight degree, five deaths only being attributed to it. It is probable however that the disease may have increased the mortality by producing Bronchitis and Pneumonia as fatal complications. Compared with other Towns, we are fortunate for the mildness Influenza assumed in Southampton.

Inquests.—One hundred and thirty five Inquests were held upon 89 males and 46 females or 9·8 per cent of the total deaths, against a percentage of 5·8 for the whole of England and Wales.

Infantile Mortality.—Infantile mortality includes the deaths arising among children under one year. This mortality amounted to 163 males and 154 females, propucing a total of 317, equal to 157 deaths per 1000 births, compared with 159, the general average for England and Wales.

The principal diseases from which these deaths occurred are :—

Measles	9	Tubercular diseases of Intestine ..	24
Diarrhœa	47	Ditto of other Organs	10
Convulsions ..	43	Premature Birth ..	48
Wasting Diseases ..	30	Bronchitis & Pneumonia	48
Whooping Cough ..	4		

Deaths under one year in proportion to registered Births for seven years in Southampton, and general average for England and Wales.

	Southampton.		England and Wales.	
1887	145	per 1000 Births.	145	per 1000 Births.
1888	126	,,	144	,,
1889	117	,,	144	,,
1890	129	,,	151	,,
1891	123	,,	149	,,
1892	148	,,	148	,,
1893	157	,,	159	,,

ZYMOTIC DISEASES.

The total deaths from Zymotic Diseases during 1893 amounted to 172, 49 being of a notifiable and 123 of a non notifiable character against a total of 111 in 1892 and 54 in 1891 respectively.

	1891.	1892.	1893.	
Small Pox	1	1	9	Notifiable under the Infectious Disease Notification Act, 1889. Death rate 0·73
Scarlatina	3	2	4	
Diphtheria	2	1	6	
Membranous-Croup	0	1	2	
Enteric or Typhoid Fever	11	18	22	
Erysipelas	1	3	5	
Puerperal Fever	1	2	1	
Measles	12	8	45	Not Notifiable under The Infectious Disease Act, 1889 Death rate 1·84
Whooping Cough	5	20	15	
Influenza	3	41	5	
Diarrhœa	13	8	54	
Remittent Fever	0	0	1	
Pyæmia and Septicæmia	1	6	3	
Syphilis	1	0	0	
Totals	54	111	172	

ZYMOTIC DEATH RATE.

A distinct increase as has just been shown occurred in the number of deaths from Zymotic Diseases. This was principally due to Small Pox, Typhoid Fever, Measles, and Diarrhœa. The mortality from Measles and Diarrhœa has been previously referred to.

The Zymotic Death Rate calculated upon the entire list equals 2·57 per 1000 of the population

The mortality under this heading is of great value in forming an estimate of the healthiness of a Town, and, although this year it stands in Southampton at 2·57 per 1000 of the Population compared with 1·69 during 1892, yet, considered in comparison with other towns, it is favourable notwithstanding the adverse circumstances of the year. See Table VII. The rates have been calculated upon the deaths occurring from the diseases shown in Table of Zymotic Diseases.

Typhoid Fever.—One hundred and seven cases of this disease were notified under the Infectious Disease Notification Act, and of these 22 succumbed. In this particular disease the mortality has been high, being 21·4 per cent of the persons attacked. Of the total of 107, twenty eight cases were treated at the Royal South Hants Infirmary. In 1892 17 cases of Typhoid Fever were treated at the Hospital at West Quay, two of these proving fatal.

Several sad instances came under my personal knowledge in which I believe that if we had had the necessary accommodation, in many cases lives would have been saved. Unfortunately the West Quay Hospital is only capable of receiving patients suffering from one class of disease at the same time, and at the period to which I refer it was occupied by Small Pox patients.

The death rate from the principal Infectious Diseases per 1000 of the population is as follows :—

	1891.	1892.	1893.
Small Pox	·01	·01	·13
Scarlet Fever	·04	·03	·06
Whooping Cough	·07	·30	·22
Typhoid Fever	·17	·27	·32
Measles	·18	·12	·67
Diphtheria	·03	·01	·09
Diarrhœa	·20	·12	·88

MARRIAGES, 1893.

There has been a marked increase in Marriages for 1893, the number being the largest recorded during the past eight years. One may fairly argue that this increase is in a measure an index of the greater prosperity of the Town.

TABLE I.

MARRIAGES, 1893.

Quarter ending.	*Town Proper.*	*Portswood.*	*Total.*
31st March, 1893.	97	8	105
30th June, ,,	168	15	183
30th Sept., ,,	149	16	165
31st Dec., ,,	180	15	195
Totals.	594	54	648

TABLE II.

MARRIAGES IN SOUTHAMPTON FROM 1886 to 1893.

Year.	*Number.*	*Year.*	*Number.*
1886	481	1890	520
1887	520	1891	583
1888	551	1892	589
1889	514	1893	648

NOTE.—For the returns of Marriages, I am indebted to the courtesy of Mr. W. H. Rowland and Mr. M. F. Curtis, the District Registrars for Southampton and the Tything of Portswood.

COMPARATIVE DEATH RATE IN THE MUNICIPAL WARDS.

The comparative mortality in the various Town Wards is shown in Table III.

The Death-rate is calculated from the exact population given by the Census of 1891, and a local register of deaths kept in the Health department.

Hitherto these figures have not been given, being unable to obtain from official sources the exact populations of these districts.

In order to make the comparisons more accurate, the public institutions have been treated separately in the same table, so that the fact of the Royal South Hants Infirmary or the Workhouse being in a particular Ward for these statistical purposes has not been considered.

The populations and deaths in these are shown separately.

It will be noticed that those Wards where the dwellings are most crowded and dilapidated, namely, St. James' and the Town Wards, have, as one would expect, the highest mortality.

TABLE III.

DEATH RATE IN EACH OF THE MUNICIPAL WARDS.

No. of Ward.	*Name of Ward.*	*Pop. Census 1891.*	*Zymotic Diseases.*	*Rate.*	*Phthisis.*	*Rate.*	*All other Diseases.*	*Rate.*	*Total Deaths.*	*Total Death Rate.*
1	Town Ward	6269	10	1·59	13	2·07	110	17·54	133	21·2
2	St. James' Ward ..	6787	21	3·09	13	1·92	129	19·00	163	24·0
3	St. Mary's Ward ..	7649	27	3·53	9	1·17	126	16·44	162	21·1
4	All Saints Ward ..	5950	6	1·00	5	0·84	76	12·77	87	14·6
5	Trinity Ward ..	5315	14	2·63	11	2·07	91	17·12	116	21·8
6	Northam Ward ..	7333	31	4·23	12	1·63	96	13·09	139	18·9
7	Nichols Town Ward	7324	14	1·91	6	0·81	94	12·83	114	15·5
8	Newtown Ward ..	6028	9	1·49	7	1·16	71	11.77	87	14·4
9	Bevois Ward ..	6058	11	1·81	4	0·66	74	12·21	89	14·6
10	Portswood Ward ..	5932	11	1·85	2	0·33	59	9·94	72	12·1
		64645	154	2·38	82	1·27	926	14·32	1162	17·9
	Public Institutions.									
	The Workhouse ..	560	2	..	16	..	99	..	117	..
	R. S. H. Infirmary ..	120	8	..	4	..	71	..	83	..
	Fever Hospital ..	..	8	..	..	..	..	..	8	..
		65325	172	2·63	102	1·56	1096	16·77	1370	20·9

TABLE IV.

DEATHS FROM ALL CAUSES AT SUBJOINED AGES IN THE BOROUGH OF SOUTHAMPTON, FROM 1884 to 1893.

Year.	*At all Ages.*	*Under 1 Year*	*1 and under 5*	*5 and under 15*	*15 and under 25*	*25 and under 60*	*60 and upwards*
1884	1052	226	123	39	52	304	308
1885	1190	281	169	42	49	319	330
1886	1153	270	109	44	57	318	355
1887	1214	286	145	54	59	321	349
1888	1094	252	130	52	49	290	321
1889	1081	212	145	31	44	296	352
1890	1168	239	158	44	53	326	348
1891	1191	252	102	41	55	314	427
1892	1466	283	157	52	48	425	501
1893	1370	317	167	58	61	401	366

TABLE V.

CAUSES OF DEATHS IN SOUTHAMPTON FOR TEN YEARS.

CAUSES.	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893
Small Pox ..	—	3	—	—	—	—	—	1	1	9
Scarlatina ..	7	6	16	23	7	3	5	3	2	4
Diphtheria ..	5	5	5	3	10	6	7	2	1	6
Membranous Croup ..	—	—	—	—	—	—	1	—	1	2
Typhus Fever ..	—	—	—	—	—	—	—	—	—	—
Enteric or ,, . Typhoid ,, ..	7	7	12	8	7	5	6	9	16	22
Continued ,, ..	6	2	2	2	—	1	—	1	2	—
Relapsing ,, ..	3	—	—	1	—	2	—	—	—	—
Puerperal ,, ..	2	1	1	1	1	—	2	1	2	1
Cholera ..	—	—	—	—	—	—	—	—	—	—
Erysipelas ..	6	3	2	1	3	4	1	1	3	5
Measles ..	2	44	—	14	16	30	14	12	8	45
Whooping Cough	5	60	11	27	28	13	32	5	20	15
Diarrhœa & Dysentery	42	19	25	57	26	25	17	13	8	54
Rheumatic Fever	5	9	2	2	3	5	3	—	1	3
Ague ..	—	—	—	—	—	—	—	—	—	—
Influenza ..	—	—	—	—	—	—	3	3	41	5
Phthisis ..	112	107	132	114	107	89	105	100	108	102
Cancer ..	33	35	36	36	32	32	41	54	53	66
Bronchitis Pneumonia & Pluerisy ..	121	176	207	177	164	149	216	190	346	245
Heart Disease ..	45	77	91	74	70	80	87	108	121	98
Injuries ..	38	47	32	53	35	36	47	61	41	44
Other Diseases ..	613	589	579	621	585	601	581	627	691	644
Totals ..	1052	1190	1153	1214	1094	1081	1168	1191	1466	1370

TABLE VI.

SHOWING THE ESTIMATED POPULATION, BIRTHS, BIRTH RATE, DEATHS, DEATH RATE, AND PER CENTAGE OF ZYMOTIC DISEASES TO TOTAL DEATHS, ALSO INFANTILE MORTALITY UNDER ONE YEAR TO 1000 BIRTHS IN SOUTHAMPTON 1884 TO 1893.

Year.	*Estimated Population*	*Total Births*	*Birth rate per 1,000 persons living*	*Total Deaths*	*Death rate per 1000 persons living*	*Per centage of Zymotic disease to Total Deaths*	*Mortality of Infants under one year to 1000 Births*
1884	62,051	1966	31·68	1052	16·96	8·1	114
1885	62,737	1914	30·50	1190	18·96	13·2	146
1886	63,445	1926	30·35	1153	18·17	7·5	140
1887	64,156	1979	30·84	1214	18·92	12·1	145
1888	64,895	1996	30·75	1094	16·85	10·0	126
1889	65,615	1966	29·96	1081	16·47	9·8	117
1890	66,347	1848	27·86	1168	17·61	7·7	129
1891	64,899	2045	31·51	1191	18·35	4·5	123
1892	65,621	1911	29·12	1466	22·34	7·5	148
1893	* 66,774	2015	30·17	1370	19.96	12·6	157

* The population has been calculated upon the revised Census population of 65,325.

TABLE VII.

COMPARATIVE MORTALITY OF 28 TOWNS, SOUTHAMPTON INCLUDED.

BOROUGH.	*Estimated Population. Middle of 1893.*	*Birth Rate.*	*Death Rate.*	*Zymotic Death Rate.*	*Infantile Mortality. Deaths under 1 year per 1000 Births.*	*Average Death Rate. 10 Years.*
Bath	51,843	20·4	18·5	0·5	119	..
Birkenhead	103,817	33·0	20·53	3·7	197	19·66
Bradford	221,610	27·58	20·90	3·22	198	19·37
Bristol	225,146	30·3	18·9	1·6	141	19 27
Cardiff	142,346	35·9	19·6	2·8	171	21.5
Coventry	54,700	30·0	17·0	1·07	159	18·1
Derby	97,341	32·0	18·2	1·9	155	18·5
Gateshead	90,961	35·75	18 89	3·29	137	21·09
Hanley	56,547	37·6	20·2	3·8	189	20·3
Huddersfield ..	97,522	23·77	17·43	1·38	141	19·68
Hull	208,639	35·0	21·5	3·9	202	19·4
Leeds	382,094	32.4	22·3	3·8	206	21·7
Lincoln	42,429	27·9	19·3	2·0	175	18·1
Manchester	517,760	33.4	24·3	2·0	201	24·4
Northampton ..	62,844	29·3	17·0	2·4	173	17·6
Oldham	136,469	28·5	20·9	2·55	186	23·7
Plymouth	86,781	29·8	21·4	2·71	171	21·6
Portsmouth	167,285	28·14	18·28	3·09	161	18·4
Reading	62,833	29·49	14·85	1·62	119	16·54
Sheffield	333,922	34·7	22·25	3·6	193	22·5
Southampton ..	66,774	30·17	19·96	2·57	157	18.4
South Shields ..	84,824	34·4	21·9	3·09	181	20·77
Stockton	50,000	36·14	19·4	1·54	155	..
Wigan	57,071	40·6	24·2	5·1	187	24·4
Willesden	69,159	32·56	15·31	2·29	..	14·62
Wolverhampton ..	84,298	34·5	22·0	3·3	206	21·0
Worcester	43,480	28·6	19·2	2·1	166	20·7
Yarmouth Great ..	49,891	28·40	19·64	3.02	175	20·09

(A)

TABLE VIII.

TABLE OF DEATHS DURING THE YEAR 1893 IN THE URBAN SANITARY DISTRICT OF SOUTHAMPTON, CLASSIFIED ACCORDING TO DISEASES, AGES, AND LOCALITIES.

Names of localities adopted for the purpose of these statistics; public institutions being shown as separate localities.	Mortality from all causes at subjoined Ages.								Mortality from subjoined causes, distinguishing Deaths of Children under Five Years of Age.																					
													Fevers.																	
	At all ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.		Small Pox.	Scarlatina.	Diphtheria.	Membranous Croup	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhœa and Dysentery.	Rheumatic Fever	Ague.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Diseases.	Total.
The Borough	1162	312	157	50	43	364	236	Under 5	—	3	3	—	—	3	—	—	—	—	1	42	15	54	—	—	2	97	1	10	238	469
								5 upwards	1	1	3	2	—	12	—	—	1	—	2	3	—	—	3	—	80	132	78	21	354	693
Royal South Hants Infirmary	83	2	6	5	12	54	4	Under 5	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	3	4	8
								5 upwards	—	—	—	—	—	6	—	—	—	—	—	—	—	—	—	—	4	1	7	10	47	75
The Workhouse	117	3	2	2	4	57	49	Under 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	2	5
								5 upwards	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	13	15	12	1	69	112
Fever Hospital	8	—	2	1	2	3	—	Under 5	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
								5 upwards	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	6
Totals	1370	317	167	58	61	478	289	Under 5	2	3	3	—	—	4	—	—	—	—	1	42	15	54	—	—	5	97	1	13	244	484
								5 upwards	7	1	3	2	—	18	—	—	1	—	4	3	—	—	3	—	97	148	97	32	470	886

The subjoined numbers have also to be taken into account in judging of the above records of mortality.

Deaths occurring within the district among persons not belonging thereto.	37	1	2	1	3	27	3	Under 5	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	3
								5 upwards	1	—	—	—	—	3	—	—	—	—	—	—	—	—	—	—	3	—	2	6	19	34

(**B**)

TABLE IX.

TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS.

Names of localities adopted for the purpose of these statistics; public institutions being shown as separate localities.	Populat'n at all Ages.		Registered Births.	Aged under 5 or over 5	New cases of sickness in each locality, coming to the knowledge of the Medical Officer of Health.											Number of such cases removed from their homes in the several localities for treatment in Isolation Hospital.										
	Census, 1891.	Estimated to middle of 1893.			Small Pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Fevers.					Cholera.	Erysipelas.	Small Pox.	Scarlatina.	Diphtheria.	Membranous Croup.	Fevers.					Cholera.	Erysipelas.
									Typhus.	Enteric or Typhoid.	Continued	Relapsing	Puerperal							Typhus.	Enteric or Typhoid.	Continued	Relapsing	Puerperal		
The Borough	65325	66774	2015	Under 5	8	31	10	—	—	13	—	—	—	—	10	8	—	—	—	—	—	—	—	—	—	—
				5 upwards	110	66	41	2	—	78	—	—	3	—	96	109	—	—	—	—	—	—	—	—	—	—
Royal South Hants Infirmary	—	—	—	Under 5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
				5 upwards	—	—	—	—	--	16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
The Workhouse	—	—	—	Under 5	2	--	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	—	—
				5 upwards	5	—	—	—	—	—	—	—	—	—	3	5	—	—	--	—	—	—	—	—	—	—
Cases removed to Fever Hospital from outside districts.	—	—	—	Under 5	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—
				5 upwards	27	—	1	—	—	—	—	—	—	—	—	27	—	1	—	—	—	—	—	—	—	—
Do. Infirmary do.	—	—	—	Under 5	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
				5 upwards	—	—	--	—	—	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	65325	66774	2015	Under 5	11	31	10	—	—	14	—	—	—	—	10	11	—	—	—	—	—	—	—	—	—	—
				5 upwards	142	66	42	2	—	101	—	—	3	—	99	141	—	1	—	—	—	—	—	—	—	—

TABLE X.

TABLE SHOWING CAUSES OF AND AGES AT DEATH IN THE BOROUGH OF SOUTHAMPTON, INCLUDING PUBLIC INSTITUTIONS, FOR THE YEAR ENDED 31ST DECEMBER, 1893.

DISEASES CLASSIFIED.	AGES.														SEX.		
	0 to 1	1 to 5	Total under 5 years.	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and Upwards	Total over 5 years.	Males.	Females.	Totals.
CLASS I.—ZYMOTIC DISEASES.	60	64	124	15	6	4	8	3	5	3	4	...	...	48	74	98	172
,, II.—PARASITIC DISEASES.	...	...	...	...	..	...	...	...	...	...	...	...	...	...	...	...	...
,, III.—DIETETIC DISEASES.	...	...	...	...	...	3	1	...	2	...	...	...	...	6	4	2	6
,, IV.—CONSTITUTIONAL DISEASES.	47	14	61	11	24	30	38	43	32	13	6	...	...	197	123	135	258
,, V.—DEVELOPMENTAL DISEASES.	50	...	50	...	...	...	...	...	...	14	37	15	2	68	61	57	118
,, VI.—LOCAL DISEASES.	149	84	233	29	28	30	67	87	98	114	69	8	...	530	400	363	763
,, VII.—DEATHS FROM VIOLENCE.	8	5	13	3	3	6	6	5	6	1	2	..	...	32	35	10	45
,, VIII.—NOT SPECIFIED OR ILL DEFINED CAUSES.	3	...	3	...	...	1	...	2	1	...	...	...	1	5	7	1	8
TOTAL	317	167	484	58	61	74	120	140	144	145	118	23	3	886	704	666	1370
CLASS I.—ZYMOTIC DISEASES.																	
Group 1.—*Miasmatic Diseases.*																	
Small Pox	...	2	2	1	2	1	1	1	1	...	...	...	...	7	4	5	9
Scarlet Fever	...	3	3	1	...	...	...	...	...	...	...	...	...	1	3	1	4
Diphtheria	...	3	3	3	...	...	...	...	...	...	...	...	...	3	3	3	6
Membranous Croup	...	...	...	2	...	...	...	...	...	...	...	...	...	2	1	1	2
Measles	9	33	42	2	...	...	1	...	...	...	...	...	...	3	19	26	45
Whooping Cough	4	11	15	...	...	...	...	...	...	...	...	...	...	...	4	11	15
Enteric or Typhoid Fever	...	4	4	6	2	1	5	2	2	...	...	...	...	18	7	15	22
Influenza	...	...	..	...	1	...	...	...	...	2	2	...	...	5	2	3	5
Group 2.—*Diarrhœal Diseases.*																	
Diarrhœa and Dysentery...	47	7	54	...	...	...	...	...	...	...	...	...	...	...	26	28	54
Group 3.—*Malarial.*																	
Remittent Fever.	...	..	...	...	...	1	...	...	...	...	...	...	..	1	1	...	1

TABLE X.—Continued.

Diseases Classified.	Ages.														Sex.		
	0 to 1	1 to 5	Total under 5 years.	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and Upwards.	Total over 5 years.	Males.	Females.	Totals.
Group 5.—Venereal.																	
Group 6.—Septic.																	
Erysipelas	...	1	1	...	...	...	...	...	2	1	1	...	...	4	2	3	5
Pyæmia	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	1
Septicæmia	...	...	...	...	...	1	1	...	...	...	...	...	...	2	1	1	2
Puerperal Fever	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	1
Class II.—Parasitic Diseases.																	
Class III.—Dietetic Diseases.																	
Alcoholism	...	...	...	...	...	2	1	...	2	...	...	...	...	5	3	2	5
Alcoholic Coma	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	1
Class IV.—Constitutional Diseases.																	
Phthisis	3	2	5	3	16	23	26	19	6	4	...	...	...	97	54	48	102
Tuberculosis	4	2	6	1	3	...	...	...	1	...	...	...	...	5	8	3	11
Tabes Mesenterica	24	2	26	...	...	...	...	...	...	...	...	...	...	...	11	15	26
Tubercular Meningitis	3	5	8	4	2	1	...	...	...	...	...	...	...	7	7	8	15
Tubercular Peritonitis	...	1	1	...	...	1	...	...	1	...	...	...	...	2	...	3	3
Cancer	...	...	...	...	1	4	9	22	19	6	5	...	...	66	29	37	66
Tumour	...	...	...	...	...	...	...	2	1	...	...	...	...	3	...	3	3
Abscess	1	...	1	...	...	...	...	...	...	...	...	...	...	1	1	...	1
Rheumatism	...	1	1	...	...	...	...	...	...	...	1	...	...	1	...	2	2
Rheumatic Fever	...	...	...	1	...	1	1	...	...	...	...	...	...	3	3	...	3
Rheumatie Arthritis	...	...	...	...	...	...	...	...	1	1	...	...	...	2	1	1	2
Scrofula	2	...	2	...	1	...	...	...	...	...	...	...	...	1	1	2	3
Myxœdema	...	...	. .	...	...	...	...	...	...	1	...	...	...	1	...	1	1
Diabetes	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	1
Dropsy	...	...	...	...	...	...	1	...	1	...	...	...	...	2	...	2	2
Asthenia	6	...	6	...	...	...	...	...	...	1	..	...	...	1	3	4	7

TABLE X. —Continued.

Diseases Classified.	AGES.														SEX.		
	0 to 1	1 to 5	Total under 5 years.	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and Upwards.	Total over 5 years.	Males.	Females.	Totals.
Constitutional Diseases.—Continued.																	
Anæmia	...	...	...	...	1	...	...	...	1	...	...	...	...	2	1	1	2
Hip Joint Disease	...	...	...	2	...	...	...	...	...	...	...	...	...	2	1	1	2
Congenital Syphilis	4	1	5	...	...	...	...	...	...	...	...	...	...	...	2	3	5
Syphilitic Ulceration	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1	1
CLASS V.—DEVELOPMENTAL DISEASES.																	
Old Age	...	...	...	...	...	...	...	...	...	14	37	15	2	68	37	31	68
Premature Birth	48	...	48	...	...	...	...	...	...	...	...	...	...	...	23	25	48
Imperforate Anus	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Patent foramen ovale	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
CLASS VI.—LOCAL DISEASES.																	
Group 1.—Diseases of the Nervous System.																	
Apoplexy, Paralysis, Diseases of Brain and Membranes	...	...	...	...	3	2	7	19	27	28	14	...	...	100	52	48	100
Convulsions	43	14	57	...	...	...	...	...	...	...	...	...	...	...	36	21	57
Epilepsy	...	1	1	...	2	...	1	1	...	...	...	...	...	4	3	2	5
Spasmodic Croup	2	4	6	1	...	...	...	...	...	...	...	...	...	1	7	...	7
Meningitis	2	5	7	2	1	1	1	...	...	...	...	...	...	5	5	7	12
Hydrocephalus	1	1	2	...	...	...	...	...	...	...	...	...	...	...	1	1	2
Congestion of Brain	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	1
Hemiplegia	...	...	...	...	...	...	...	...	2	2	2	...	...	6	5	1	6
Spinal Sclerosis	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	1
Locomotor Ataxy	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	...	1
Chorea	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	1
Abscess of Brain	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1	...	1
Sunstroke	...	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1

TABLE X.—Continued.

Diseases Classified.	AGES.														SEX.		
	0 to 1	1 to 5	Total under 5 years.	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and Upwards.	Total over 5 years.	Males.	Females.	Totals.
Group 3.—Diseases of the Circulatory System.																	
Heart Disease...	1	...	1	6	3	5	15	16	12	21	15	4	...	97	50	48	98
Syncope	1	...	1	...	...	1	3	6	1	5	2	1	...	19	8	12	20
Embolism	...	...	...	...	...	3	...	...	...	...	1	...	...	4	...	4	4
Thrombosis	...	...	...	...	...	...	1	...	1	...	2	...	...	4	...	4	4
Aneurysm	...	...	...	...	...	...	2	...	2	1	...	...	...	5	4	1	5
Angina Pectoris	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	1
Phlebitis	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	1
Cyanosis	2	...	2	...	...	...	...	...	...	...	...	...	...	...	1	1	2
Paralysis of Heart	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	1
Rupture of Blood Vessel...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	1
Group 4.—Diseases of the Respiratory System.																	
Bronchitis, Pneumonia, and Pleurisy ...	48	49	97	13	3	10	14	19	30	33	23	3	...	148	127	118	245
Congestion of Lungs	1	2	3	1	2	...	4	3	1	2	1	...	...	14	8	9	17
Croup	...	...	...	1	...	...	...	...	...	...	...	...	..	1	1	...	1
Laryngitis	...	1	1	1	...	...	...	...	...	...	...	...	...	1	1	1	2
Bronchial Catarrh	1	...	1	...	..	...	...	...	...	...	...	...	...	...	...	1	1
Hæmoptysis	...	...	...	...	1	...	1	...	...	...	...	...	...	2	2	...	2
Asphyxia	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Group 5.—Diseases of the Digestive System.																	
Debility, Atrophy, and Marasmus	30	4	34	...	...	...	...	...	...	...	...	...	...	...	16	18	34
Liver Diseases and Jaundice	...	...	...	...	...	...	1	1	...	...	...	...	...	2	...	2	2
Lardaceous Liver	...	...	...	...	...	...	...	...	1	1	...	...	...	2	1	1	2
Cirrhosis of Liver	...	...	...	...	..	...	2	3	3	2	...	...	...	10	6	4	10
Hepatitis	...	...	...	...	...	...	...	3	2	...	...	...	...	5	1	4	5
Enteritis	2	...	2	...	2	...	...	...	...	...	1	...	...	3	2	3	5
Gastro-Enteritis	4	1	5	...	...	1	...	...	..	...	...	...	...	1	2	4	6
Gastritis	1	...	1	...	...	...	...	...	...	...	1	...	...	1	2	...	2
Typhlitis	...	...	...	2	...	..	...	...	...	...	...	...	...	2	1	1	2
Stomatitis	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1

TABLE X.—Continued.

Diseases Classified.	AGES.														SEX.		
	0 to 1	1 to 5	Total under 5 years.	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and Upwards.	Total over 5 years.	Males.	Females.	Totals.
Diseases of the Digestive System.—Continued.																	
Catarrh of Stomach	6	...	...	...	...	...	...	...	...	...	...	...	...	...	2	4	6
Inflammation of Bowels	...	...	..	...	...	...	...	...	1	...	...	...	...	1	1	...	1
Ascites	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	1
Peritonitis	...	...	...	...	2	3	5	1	...	1	1	...	...	13	4	9	13
Cynanche Tonsilaris	...	...	...	...	...	...	1	...	...	...	...	...	...	1	1	...	1
Gastric Ulcer	...	...	...	...	1	...	1	...	...	...	...	...	...	2	...	2	2
Stricture of Æsophagus	...	...	...	...	...	...	1	..	...	...	...	...	...	1	...	1	1
Intestinal Obstruction	1	...	1	...	2	...	...	1	...	1	1	...	...	5	3	3	6
Hernia	...	...	...	...	...	...	1	...	1	1	2	...	...	5	1	4	5
Hæmorrhage of Stomach...	...	...	...	...	...	...	...	...	1	..	...	...	...	1	1	...	1
Group 6.—Diseases of the Lymphatics and Ductless Glands.																	
Addison's Disease	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	1
Group 7.—Diseases of the Urinary System.																	
Bright's Disease	...	...	...	...	...	1	2	3	5	8	...	...	...	19	15	4	19
Nephritis	...	1	1	...	1	2	2	3	...	1	...	...	...	9	6	4	10
Congestion of Kidneys	..	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	1
Hydronephrosis	...	...	...	...	...	...	1	...	...	...	...	..	...	1	1	...	1
Cystitis	...	...	...	...	1	...	...	1	1	1	...	...	...	4	4	...	4
Stricture	...	...	...	...	...	...	...	...	3	...	1	...	...	4	4	...	4
Extravasation of Urine	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Group 8.—Diseases of the Reproductive System.																	..
(*a*) Male Organs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(*b*) Female Organs																	
Placenta-prævia	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	1
Ovarian Dropsy	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	1
Ovarian Disease	...	...	...	...	...	1	...	1	...	...	...	..	...	2	...	2	2
Ovarian Tumour	...	...	...	...	...	...	...	1	...	1	...	...	...	2	...	2	2
Purpura Hæmorrhage	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	1

TABLE X.—Continued.

DISEASES CLASSIFIED.	AGES.														SEX.		Totals.
	0 to 1	1 to 5	Total under 5 years.	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and Upwards.	Total over 5 years.	Males.	Females.	
Group 9.—Diseases of the Osseous System.																	
Spinal Caries	...	...	...	1	...	...	...	...	...	...	...	...	...	1	1	...	1
Lumbar Abscess	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	1
Group 10.—Diseases of the Integumentary System.																	
Gangrene	...	...	...	...	...	...	...	1	1	2	1	...	...	5	4	1	5
Lupus	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	1	1
CLASS VII.—DEATHS FROM VIOLENCE.																	
Group 1.—Accident or Negligence.																	
Fracture or Contusions	2	...	2	1	...	3	4	2	1	...	...	...	...	11	11	2	13
Burns or Scalds	...	3	3	...	...	...	1	1	...	...	1	...	...	3	3	3	6
Drowning	...	...	...	2	1	2	...	2	...	...	...	...	...	7	7	...	7
Overlaid	3	...	3	...	...	...	...	...	...	...	...	...	...	...	1	2	3
Suffocation	2	...	2	...	...	...	...	...	...	...	...	...	...	...	1	1	2
Cut from Saw...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	1
Lead Colic	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	1
Inflammation of Lungs, from fall in River ...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	1
Run over by Train	...	1	1	1	...	...	...	...	...	...	...	...	...	1	2	...	2
Prolonged Labour	1	...	1	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Group 2.—																	
(a) *Murder*	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
(b) *Manslaughter*—Starved to Death ...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Group 3.—Suicide.																	
Hanging	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	1	1
Shot	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	1
Poison	...	...	...	...	1	...	1	...	...	1	...	...	...	3	3	...	3
Jump from Window	...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	1
,, ,, Tower	...	...	...	...	..	...	...	1	...	...	...	...	...	1	1	...	1

TABLE X.—Continued.

Diseases Classified.	Ages.														Sex.		
	0 to 1	1 to 5	Total under 5 years.	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and Upwards.	Total over 5 years.	Males.	Females.	Totals.
CLASS VIII.—DEATHS FROM ILL-DEFINED OR NOT SPECIFIED CAUSES.																	
Cerebral	...	...	...	...	...	1	...	1	1	...	...	...	...	3	2	1	3
Natural Causes	1	...	1	...	...	...	...	1	...	...	...	...	1	2	3	...	3
Found Dead	2	...	2	...	...	...	...	...	...	...	...	...	...	...	2	...	2

TABLE XI.

STREET LOCALIZATION OF DEATHS.

1. TOWN WARD.

	Zymotic Diseases.	*Phthisis.*	*Other Diseases.*	*Total.*
Albion Place	—	—	1	1
Back of Walls	—	—	7	7
Bargate street	—	—	1	1
Bell Street	—	1	4	5
Benwell's Buildings	—	1	—	1
Brewhouse Court	—	—	1	1
Brewhouse Lane	—	—	2	2
Broad Lane	—	—	1	1
Bugle Street	—	2	3	5
Canal Walk, 40 to 78 Lower, 1 to 20 and 38 to 83 Upper	2	1	8	11
Castle Gardens	—	—	2	2
Castle Lane	—	—	1	1
Castle Place	—	—	4	4
Castle Square	—	—	5	5
Churcher's Court	—	—	2	2
Collis Court	—	—	1	1
Cross Street, Bell Street	—	—	1	1
Cushen's Court	—	—	2	2
East Street, 1 to 28, 86 to 123 ...	—	—	1	1
Fives Court	1	—	—	1
Forest View	—	—	1	1
French Street	1	1	7	9
Gloucester Court	—	—	1	1
Gordon's Passage	—	—	1	1
Green's Court	—	—	1	1
Hanover Terrace	—	—	1	1
High Street	1	2	8	11
Lansdowne Place	—	1	2	3
Lansdowne Hill	—	—	3	3
Maddison Street	—	—	1	1
Mount Street	1	—	4	5
Mount Place	—	1	—	1
Orchard Lane, 58 to 75	—	—	2	2
Oriental Terrace	—	—	2	2
Park View	—	—	1	1
Pepper Alley	—	1	1	2
Roe's Court	—	—	1	1
Simuel Street	—	—	4	4
St. George's Court	—	—	4	4
St. John's Buildings	—	—	2	2
St. Michael's Square	2	—	3	5
St. Thomas' Court	—	—	1	1
Strand	1	—	1	2
Town Quay	—	2	—	2
Victoria Court	1	—	—	1
Vyse Lane	—	—	1	1
Westgate Street	—	—	3	3
West Quay	—	—	1	1
West Street	—	—	2	2
White's Court	—	—	1	1
Williams' Court	—	—	1	1
Winkle Street	—	—	1	1
Fever Hospital	8	—	—	8
S.S. Rathlin, Town Quay	—	—	1	1

2. ST. JAMES'S WARD.

	Zymotic Diseases.	Phthisis.	Other Diseases.	Total.
Albert Road	—	1	4	5
Bell's Court (Queen Street)	—	—	2	2
Bernard Street	2	—	2	4
Bridge Road	—	1	4	5
Briton Street	—	—	3	3
Brunswick Square	1	—	1	2
Cambridge Street	1	1	5	7
Canal Walk, 21 to 37 Upper, 1 to 39 Lower	—	—	7	7
Canute Road	—	—	4	4
Challis' Court	—	—	1	1
Chandos Street	—	—	1	1
Chantry Road	1	—	3	4
Charles Street	—	1	3	4
Charlotte Street	1	—	—	1
College Street	1	—	6	7
Coombe's Court	—	—	1	1
Cross Street, Rookery	—	1	4	5
Cross Court	—	—	2	2
Deacon's Court	1	—	1	2
Duke Street	1	1	2	4
East Street, 65 to 85	—	—	1	1
Eldon Street	—	—	1	1
Floating Bridge Road	—	—	3	3
Guillaume Terrace	1	—	2	3
Henry Street	1	—	—	1
Jessie Terrace	—	—	1	1
King Street	2	3	3	8
Marsh Lane	1	—	2	3
Nelson Place, L.C.W.	—	—	3	3
Nelson Place, Cross Street	—	—	1	1
Orchard Lane, 2 to 54	1	—	6	7
Orchard Place	—	1	7	8
Oxford Street	—	—	1	1
Queen Street	1	—	2	3
Queen's Terrace	—	—	4	4
Richmond Street	—	—	2	2
Russell Court	—	—	1	1
Russell Street	—	—	7	7
St. George's Street, L.C.W.	—	1	2	3
Terminus Terrace	2	—	3	5
Threefield Lane	—	1	2	3
Union Place	1	—	1	2
Union Street	1	—	4	5
Winchester Terrace	1	1	2	4
Southampton Docks	—	—	10	10
Southampton Station	—	—	1	1
River Itchen	—	—	1	1

3. ST. MARY'S WARD.

	Zymotic Diseases.	Phthisis.	Other Diseases.	Total.
Albert Street, Chapel	3	2	7	12
Anderson's Road	1	—	4	5
Anglesea Terrace	—	—	5	5
Bell's Buildings	—	—	2	2
Bevois Street, 92 to 141	2	—	2	4
Chapel Road	1	—	9	10
Chapel Street	1	—	5	6
Church Street	—	—	1	1
Coleman Street	1	—	4	5
Cook Street	—	—	1	1
Cross House	1	—	2	3
Cumberland Street	—	—	4	4

ST. MARY'S WARD—*Continued.*	*Zymotic Diseases.*	*Phthisis.*	*Other Diseases.*	*Total.*
Dock Terrace	2	—	3	5
Dock Street	—	1	5	6
Edward Street	1	—	6	7
Elm Street	2	—	3	5
Glebe Road	2	1	2	5
Grove Street	2	2	11	15
Houndwell Gardens	—	—	2	2
Houndwell Place	—	1	2	3
James Street	—	—	9	9
Marine Parade	—	—	2	2
Miller's Passage	—	—	1	1
Nelson Street	—	—	2	2
Paget Street	4	—	4	8
Pope's Buildings	—	—	3	3
River Street	—	—	1	1
Ryde Terrace	—	1	1	2
St. George's Court	—	—	1	1
St. George's Place	—	—	4	4
St. George's Street	—	1	2	3
St. Mary's Buildings	—	—	1	1
St. Mary's Place	—	—	2	2
St. Mary's Street, 2 to 73—129 to 152	1	—	7	8
The Workhouse	2	16	99	117
St. Thomas Buildings	—	—	1	1
Wharf Street	3	—	1	4
York Square	—	—	1	1
York Street, Houndwell	—	—	3	3
4. ALL SAINTS' WARD.				
Above Bar Street	—	—	3	3
Amoy Street	1	—	—	1
Anglesea Place	—	—	1	1
Bannister Street	—	—	6	6
Bedford Place	2	1	7	10
Birmingham Street	—	—	1	1
Canton Street	1	—	3	4
Carlton Crescent	—	1	10	11
Carlton Place	—	—	4	4
Clifton Terrace	—	—	1	1
Cumberland Place	—	—	1	1
Hanover Buildings	—	—	1	1
Hill Street	—	—	3	3
Kingsfield Road	—	—	4	4
Manchester Street	—	—	2	2
Marland Place	—	—	1	1
Mount Place	—	—	5	5
New Buildings	—	—	1	1
Polygon	1	—	1	2
Polygon Road	—	1	1	2
Portland Terrace	—	—	2	2
Regent Court	—	—	1	1
Regent Street	—	—	2	2
Regent Place	—	—	2	2
Southampton Street	1	1	1	3
Spa Road	—	—	1	1
Sussex Terrace	—	—	1	1
Tower Place	—	—	2	2
Waterloo Place	—	1	1	2
West Marlands	—	—	1	1
West Marlands Terrace	—	—	1	1
Western Shore Road	—	—	5	5

	Zymotic Diseases.	Phthisis.	Other Diseases.	Total.
5. TRINITY WARD.				
Ascupart Street	—	—	1	1
Bevois Street, 1 to 49	—	1	6	7
Broad Street	—	—	1	1
Clifford Street	—	2	8	10
Cossack Street	—	2	4	6
Craven Street	3	—	3	6
East Park Terrace, 1 to 33	1	—	3	4
John Street	2	—	4	6
Longcross Street	—	—	1	1
Magdalene Terrace	1	—	2	3
Middle Street	—	—	6	6
New Road	1	1	8	10
North Front	—	1	10	11
Peto Street	1	—	—	1
Portland Place	—	—	1	1
South Front	—	—	8	8
St. Andrew's Road	—	1	7	8
St. Mary's Street, 76 to 172	1	—	5	6
Trinity Road	1	—	4	5
Trinity Terrace	—	—	1	1
West Front	1	—	1	2
Wilton Street	1	—	1	2
Winchester Street	1	3	6	10
6. NORTHAM WARD.				
Albert Street, Northam	—	—	5	5
Belvidere Road	—	—	2	2
Belvidere Terrace	1	—	3	4
Bevois Street, 52 to 90	2	1	2	5
Campbell Street	—	—	2	2
Clarence Street	1	—	1	2
George Street	1	—	—	1
Granville Street	—	—	1	1
Graham Street	—	—	2	2
Guilford Street	1	—	1	2
Kent Street	1	—	2	3
Leyton Road	—	—	1	1
Longcroft Street	1	1	3	5
Marine Parade, 1 to 9	—	—	1	1
Marine Street	1	—	—	1
Melbourne Street	2	1	8	11
Millbank Street	4	3	13	20
Millstone Point	1	1	1	3
Northam Road, 75 to 240	3	1	6	10
Oak Road	1	2	—	3
Parsonage Road	—	—	2	2
Princess Street	2	—	3	5
Princes Street	3	—	3	6
Radcliffe Road	2	—	13	15
Rochester Street	—	—	2	2
Standford Street	1	1	5	7
Union Road	—	—	3	3
Victoria Street	—	—	1	1
York Street, Northam	2	1	5	8
Bond Street	1	—	3	4
Williams Street	—	—	1	1
Wigram's Cottage	—	—	1	1
7. NICHOLS TOWN WARD.				
Argyle Road	3	—	—	3
Bellevue Road	1	—	3	4

NICHOLS TOWN WARD—*Continued.*	*Zymotic Diseases.*	*Phthisis.*	*Other Diseases.*	*Total.*
Bellevue Street	1	1	2	4
Brinton's Road	1	1	9	11
Brunswick Place	—	—	3	3
Clovelly Road	—	—	2	2
Compton Walk	1	1	2	4
Derby Road, 2 to 136 even—1 to 113 odd	2	1	7	10
Dorset Street	—	—	3	3
East Park Road, 38 to 41	—	—	1	1
Exmoor Road	1	—	2	3
Graham Road	—	1	1	2
Hartington Road	—	—	3	3
Nichols Road	—	—	1	1
Northam Road, 1 to 92	1	—	5	6
Northam Street	—	1	5	6
Northbrook Road	—	—	3	3
Northumberland Road, 2 to 130 even—1 to 123 odd	2	—	10	12
Oxford Avenue	—	—	12	12
St. Mark's Road	—	—	1	1
St. Mark's Terrace	—	—	1	1
St. Mary's Road, 20 to 137	1	—	16	17
St. Peter's Road	—	—	2	2
8. NEWTOWN WARD.				
Alfred Street	1	1	7	9
Avenue, 1 to 21	—	—	1	1
Bellevue Road, 2 to 62, even numbers ...	—	—	4	4
Brinton's Terrace	—	1	1	2
Bullar Street	—	—	3	3
Carlton Crescent, 1 to 14	—	—	3	3
Cliff Road, 1 to 31	—	—	1	1
Cranbury Avenue	—	4	4	8
Cranbury Place	—	—	1	1
Denzil Avenue	—	—	2	2
Derby Road, 138 to 270 even—115 to 205 odd	1	—	4	5
Dover Street	—	—	3	3
The Infirmary	8	4	71	83
Frederick Street	—	—	1	1
Liverpool Street	1	—	3	4
Lyons Street	—	—	1	1
London Road	—	—	1	1
Middle Street, 1 to 70	—	—	1	1
Mount Pleasant Road, 12 to 70 ...	1	—	4	5
Northumberland Road, 136 to 268 even—125 to 279 odd	5	1	10	16
Onslow Road	—	—	4	4
Ordnance Road	—	—	2	2
Raven Road	—	—	1	1
Rockstone Lane	—	—	3	3
Rockstone Place	—	—	1	1
York Street, Bevois Town	—	—	5	5
9. BEVOIS WARD.				
Alma Road	1	—	2	3
Bevois Hill	—	—	4	4
Avenue, 25 to 56	—	—	2	2
Avenue Road	—	—	8	8
Bevois Valley Road, 16 to 14... ...	4	1	6	11
Blackberry Terrace	—	—	2	2
Cambridge Road	—	1	3	4

BEVOIS WARD—*Continued.*

	Zymotic Diseases.	*Phthisis.*	*Other Diseases.*	*Total.*
Castle Street, 2 to 30, evens	1	—	—	1
Cedar Road	—	—	6	6
Duke's Road (part of)	1	—	4	5
Earl's Road	—	—	2	2
Gordon Avenue	—	—	6	6
Livingstone Road	1	—	—	1
Lodge Road	—	—	5	5
Marine Terrace	1	—	3	4
Mount Pleasant Road, 1 to 11, 72 to 96	1	1	4	6
New Alma Road	—	—	2	2
Padwell Road	—	—	2	2
Peterborough Road	—	—	3	3
Spear Road	—	—	3	3
Valley Road	1	1	6	8
Railway between Duke's Road and Mount Pleasant Road	—	—	1	1

10. PORTSWOOD WARD.

	Zymotic Diseases.	*Phthisis.*	*Other Diseases.*	*Total.*
Aberdeen Road	1	—	4	5
Adelaide Road	4	—	6	10
Belmont Place	1	—	1	2
Duke's Road (Victoria Terrace portion)	—	—	1	1
Eastfield Road	—	—	2	2
Highfield	—	—	3	3
Ivy Road	—	—	1	1
Kent Road	2	1	4	7
North Road	—	—	3	3
Osborne Road	—	—	4	4
Park Road	—	—	2	2
Portswood, Old	—	—	3	3
Portswood Road	1	—	1	2
Priory Road	2	—	13	15
Stanley Road	—	—	1	1
St. Denys Road	—	—	3	3
Westridge Road	—	—	1	1
Westwood Road	—	—	1	1
Winchester Road	—	1	2	3
Winn Road	—	—	2	2
The Common	—	—	1	1

PART II.

GENERAL.

PART II.

GENERAL.

In my last Annual Report I pointed out :—

I. The state of unpreparedness this Town was in for the treatment of infectious cases in any variety and number.

II. The difficulty which might arise in isolating more than one variety of Infectious Disease at the same time.

III. The risk of extension of Small Pox isolated at West Quay to the neighbourhood by reason of the position of the existing Hospital.

IV. The danger of the Hospital Staff spreading disease, as the Hospital and administrative buildings are one structure.

The whole of the statements made were amply verified by the outbreak of Small Pox in 1893 subsequent to the issue of my Report, which included the isolation of 152 cases and necessitated the erection of an iron hospital with 12 beds upon land adjoining the present Hospital site. Before the erection of this temporary building it was necessary to utilise the Corporation cottages at Mansbridge for the isolation of patients. The accommodation, however, still proving insufficient, necessitated the hiring in a hurried manner of the S. S. Morglay, from Febuary 3rd to October 3rd, as a floating Hospital; this, with the expenses of fitting, entailing a considerable cost. The outbreak, in spite of most rigorous steps, did not abate until the cases were wholly isolated and treated on board the vessel, showing clearly the excellent effects obtained from isolation in a floating hospital located at a great distance from habitations. Nor could the origin of any cases afterwards occurring be traced to the temporary hospital ship which was moored in the River Test, about 2½ miles above the Town Quay.

ISOLATION OF OTHER INFECTIOUS DISEASES.

The treatment of Small Pox at the West Quay Hospital precluded, as I have already pointed out, isolation in the same building of any other infectious disease occurring at same time, consequently no effective steps could be taken for the treatment of a severe outbreak of Measles which caused 45 deaths during the Spring of 1893. Had better Hospital accommodation been in existence this epidemic would have been checked in its early stages and loss of life, no doubt, prevented.

Several cases of Typhoid Fever occurred which were also debarred the advantages of separate hospital treatment from the same cause, and seriously affected patients residing in the poorer districts, where the ignorance and poverty of parents, combined with the insanitary surroundings, led to great distress and the extension of the disease to the members of the same family. Thanks are due to the Governors of the Royal South Hants Infirmary for admitting to their Wards as many cases as they could accommodate, but these did not include the whole number, consequently a higher per centage mortality occurred among the persons attacked. In the early part of the year application was made for the admission to the West Quay Hospital of Scarlet Fever cases, but these had also to be refused for the same reason.

THE RELATIONS OF TOWN AND PORT.

These are so intermingled that the prevalence of infectious disease in one affects seriously the interests of the other. Moreover, the population of the Borough is 66,774, but consideration should be made for the floating population and the number of persons brought to the Port by Ships staying for short periods before proceeding to their destinations, many of whom have been subjected to special risks of infection abroad especially by Cholera and Small Pox.

If we have not means at our disposal to isolate any cases introduced into the Port from the above source the Town runs a special risk of importing and spreading the disease. For this reason we should be prepared with a Port Sanatorium or Hospital where such cases might be isolated without even passing through the Town, and the serious risk now encountered would be then entirely removed. As a practical illustration of this, we have the following indisputable facts relating to the importation of infectious disease through the Port, and the difficulties and expense of isolation under our existing system.

Southampton runs a special risk in regard to the importation of Small Pox, owing to the trade she has with places where it is seldom absent, as the following list shows :—

INTRODUCTION OF SMALL POX INTO SOUTHAMPTON FOR THE PAST FOUR YEARS, AND SHOWING THE SOURCE OF IMPORTATION.

Date.	*Case.*	*How introduced.*	*Remarks.*
1890.	Child.	North German Lloyd Steamer from Bremen.	Removed immediately to Hospital.
	Sailor.	Per Royal Mail Steamer from Pernambuco.	ditto.
	ditto.	ditto.	
	ditto.	ditto.	Discharged from Ship, went to James Street, then removed to Hospital.
1891.	* Sailor.	S.S. "Tamar," from Pernambuco.	Removed to Hospital August 15th.
	* Sailor.	ditto.	Discharged. Resided in town; moved from Lodgings Sept. 4th.
	*Fireman.	S.S. "Clyde."	Discharged, and removed from his Lodgings a few days after.
	*Fireman.	S.S. "Para," from Brazil.	Removed from his Home after short stay in Port.
		Eleven other cases.	Contracted from Sailors of above Ships.
1892. January.		S.S. "Tamar," from Brazil.	Two cases removed to Hospital.
November.		ditto.	One Steward developed Small Pox seven days after his arrival, and causing several other cases owing to the delay of his isolation in Hospital, which was occupied with Scarlet Fever patients unfit for removal.

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* In 1891 these four imported cases led to the infection and isolation of eleven residents. Two cases were distinctly traced to Hospital infection; these occurred in Castle Lane and Chesterfield Terrace, within a few yards of the Hospital.

INTRODUCTION OF SMALL POX, &c. *(continued.)*

Date.	*Cases.*	*How Introduced.*	*Remarks.*
1893 Feb. 6th.	1 Sailor 1 Steward	S.S. "Scot," from the Cape.	These patients were removed off Netley. Six other stewards who had been in contact with these patients, although well, were removed, and thoroughly disinfected.
July 17th.	Fireman	S.S. "Berlin."	Removed to Hospital immediately.
Aug. 21st	Passenger	S.S. "Scot."	Removed from ship off Netley. His attendant was also removed and throughly disinfected.

1893.

The increase in the cases of Small Pox was due in many instances to the importation of this disease by tramps. (See special Small Pox report herein.)

In April, 1893, the s.s. "Chester" arrived with patients having severe Scarlet Fever, and then the "New York" arrived a week later with the same disease. These cases could not be taken to West Quay, where there were already several Small Pox patients, and arrangements were made by the Authority with a medical man who was acting Medical Officer of Health (during a term of leave which had been granted me) to remove them to his own house, which cost £81 18s.

Then came a case of Measles by one of the American Liners which no one could receive, and was finally isolated in a furnished house secured by the Corporation at a rental of £6 10 0 per week. In August a case of Diphtheria was landed from a North German Lloyd steamer, and was isolated at West Quay (Small Pox having then been stamped out). A case of Cholera was brought to the Port in September 1893, and isolated on board the "Morglay" without entering the Town. The expenses of temporary provisions for Small Pox, paid for directly out of Revenue, is shown in the Appendix. These facts, together with the uncertainity we are always in and the danger of multiplying cases of infectious disease brought to our shores, if not isolated, should render the desirability of better hospital accommodation and a Port Sanitary Hospital clear to every one, more especially when we consider the important advantage gained in distributing the cost of proper provisions for isolation over a number of years by a loan instead of paying it out of revenue, and so raising the rates out of all proportion by the expense incurred for temporary measures that a small outbreak of any disease in our present state would occasion.

Note.—While this Report has been in preparation a Port Sanitary Hospital has been completed, greatly improving our position in the treatment of Infectious Diseases.

The cost of maintaining proper hospital accommodation and staff should be considered as an insurance against epidemics, and would amount to a trivial sum compared with the actual expense of an epidemic when all provision had to be made hurriedly and expensively.

INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889.

In accordance with the provisions of this Act, 494 cases of notifiable diseases were communicated to your Medical Officer as shewn in the following Table. Each of these cases was carefully observed, and the isolation of patients secured as far as possible in their homes, with the exception of Small Pox cases, which were all, with one exception, isolated in Hospital.

(See Small Pox Report).

TABLE XII.

NUMBER AND DESCRIPTION OF CASES OF INFECTIOUS DISEASES REPORTED TO THE MEDICAL OFFICER OF HEALTH DURING THE YEAR 1893. — MEASLES, WHOOPING COUGH, AND DIARRHŒA ARE OMITTED FROM THE TABLE, THEIR NOTIFICATION NOT BEING COMPULSORY.

Diseases.	*Quarter ending Mar.* 31.	*Quarter ending June* 30.	*Quarter ending Sept.* 30.	*Quarter ending Dec.* 31.	*Total per Year.*	*Mortality per Year.*
* Small Pox ..	80	37	8	—	125	8
Diphtheria ..	10	6	16	19	51	6
Membranous Croup	1	—	1	—	2	2
Erysipelas ..	12	28	22	47	109	5
Scarlet Fever ..	12	36	32	17	97	4
Enteric or Typhoid Fever	12	28	28	39	107	19
Puerperal Fever ..	1	—	—	2	3	1
Total.. ..	128	135	107	124	494	45

* Besides this total, 28 were removed for isolation to the Town Hospital from outlying Districts. Eight cases of enteric fever were admitted to R.S.H. Infirmary from outlying Districts.

SOUTHAMPTON FEVER HOSPITAL, WEST QUAY.

The hospital accommodation was permanently increased by the erection of a temporary iron building for twelve beds, and temporarily by securing the use of the Corporation Cottages at Mansbridge, and the hiring of a ship from Feb. 3rd till Oct. 3rd. Table XVI. shows the number of admissions.

The greatest number of persons isolated at one time amounted to 61. The greatest number on the " Morglay " at one time equalled 42.

TABLE XIII.

SHOWING ADMISSIONS TO FEVER HOSPITAL FOR THE PAST FIVE YEARS.

Diseases.	1889	1890	1891	1892	1893
Small Pox	1	4	15	37	152*
Scarlet Fever	1	8	10	18	—
Diphtheria	—	—	—	—	1
Typhoid Fever	—	7	—	17	—
Measles	1	1	—	—	2
Suspected Cholera	—	—	—	—	1
Totals	3	20	25	72	156

* Includes 2 from South Stoneham, 17 from Shirley, and 9 from Romsey. It does not include, however, the only case unisolated, which occurred in Kingsland. The patient was too ill for removal, and died at home within a few hours of his notification.

TABLE XIV.

SHOWING NUMBER OF CASES ADMITTED TO FEVER HOSPITAL, 1893.

Diseases.	*Under 5 Years.*	*Over 5 Years.*	*Recovered.*	*Deaths.*	*Remaining.*	*Payments Received.*
Small Pox	10	114	117	7	—	£375 13s. This does not include the sum of £158 14s. outstanding.
,, ,, Shirley	—	17	16	1	—	
,, ,, Romsey	1	8	9	—	—	
,, ,, S. Stoneham	—	2	2	—	—	
Diphtheria	—	1	1	—	—	
Measles	1	1	2	—	—	
Cholera	—	1	1	—	—	
Totals	12	144	148	8	—	£375 13 0

STEAM DISINFECTOR.

As far back as 1890 I pointed out to you the necessity of adopting a steam disinfector for the purpose of purifying infected bedding and articles of clothing. In consequence of this Report the old machine for disinfection by hot air was repaired, but proved, in an unmistakeable manner, its inability to disinfect clothing infected by Small Pox.

This disease reappeared in some instances where clothing was returned to its owners.

In face of the above fact during the outbreak of Small Pox, 1892-3, it became necessary to burn all infected articles and compensate the owners for any loss sustained thereby. The Health Committee again considered the advisability of securing a suitable and reliable disinfector, and chose the superheated steam disinfector made by Goddard, Massey, and Co., having separate working rooms for infected and the disinfected articles, which was erected in 1893.

The machine has carried out all that was required of it, and, beside securing to this Corporation a considerable saving in expense, has given us a means of effectually purifying without risk or damage infected materials.

The same machine has been useful in the Port Administration in assisting the American Line in disinfecting the clothing and goods of passengers, who otherwise would have been prevented sailing, being referred for disinfection by the American Medical Officer resident at this Port. The other uses for the Port will be mentioned later.

SMALL POX.

From January 1st to September 15th, 153 cases of Small Pox occurred in the Town, being a continuance of the outbreak which began December 25th, 1892. The difficulty experienced in controlling this outbreak was in a great measure due to the fact that the majority of cases existed in the courts and alleys. From the description of these places given in the recent Special Report, the dangers with which we were beset at the time of the outbreak will be readily understood. The whole of this number, with one exception, were isolated in Hospital by the Health Authority, the one exception being due to the condition of the patient precluding his safe removal. He died at home a few hours after notification of the case. It is satisfactory to know that, in spite of some opposition, in no instance was a magistrates' order applied for removal of any patient.

Our system of procedure in cases where opposition was offered to removal, was to place two inspectors outside the house to warn and prevent persons from the outside entering, and to caution persons leaving, the house, that legal proceedings would be taken against them for exposing infected articles, namely, their clothing, to the common danger of the public, they coming from an infected house, under the provisions of the Public Health Amendment Act. This had the effect of soon bringing a request from those having the custody of the sick, or from the patients themselves, to be admitted to Hospital.

Every possible care was taken to check the spread of the disease. Your Medical Officer of Health, without waiting the result of his notification to the Vaccination Officer, visited every house in which cases occurred, and the immediate neighbourhood, offering gratuitous vaccination. Notices were also issued that persons might be revaccinated at his office every evening at seven o'clock. By this course between three and four hundred vaccinations were carrried out. Several persons who had been exposed to infection refused revaccination, many of them contracting the disease at the termination of the usual period of incubation.

Case 43 is an excellent example. Two constables had occasion to visit a house in which a boy was suffering from Small Pox (discovered after their visit). Finding they had made this visit, I immediately inquired at head quarters who these men were, and informed the Inspector that they should be immediately revaccinated and that I would perform the operation if they would come to my house. When they came I could persuade only one to submit to the proposal, with the result that he escaped, while the other, who refused, was admitted to Hospital a fortnight later with severe confluent Small Pox, from which he nearly lost his life.

Out of hundreds of persons who were revaccinated either by myself, the public vaccinators, or private medical practitioners during the outbreak, only two cases, Nos. 3 and 28 contracted the disease, and in them it assumed a mild form.

Five patients had been revaccinated, Nos. 1, 15, 29, 62, 90, at varying periods before admission (see Table), before contracting the disease. Among the number of unvaccinated persons are included persons in whom no trace whatever of the operation can be found. In such cases it will be seen, with hardly any exception, the disease assumed a severe form.

Of the eight fatal cases due to this disease, all occurred among unvaccinated persons.

It is further interesting to note that all persons employed at the Hospital were revaccinated before commencing duty, and in no instance did a member of the Staff contract Small Pox, in spite of their daily contact with the disease.

Tramps.—There can be little doubt that tramps, not only in this town but in other places, were responsible for the dissemination of Small Pox. Excellent precautions were, however, adopted at the casual wards at the Poorhouse, whereby all tramps were examined by a medical practitioner on their arrival; this led to the discovery of several cases. It did not, however, insure us against the danger of those who did not seek shelter at the Workhouse, as is shown in Case 96, where tramps arriving in the town from other districts had obtained sufficient means after arriving to secure beds in Common Lodging Houses. It therefore became necessary for myself and the inspectors to visit these houses at repeated intervals during the day. Several instances of this danger are given in the Tabular Summary—notably Case 96. A woman arrived in the Town in the morning, and went begging all day having in her arms a child with confluent Small Pox. At 11 p.m. she was admitted to a Common Lodging House, and on my morning visit the case was discovered.

Case 86, in which a labouring man came to Southampton from Havant. He admitted going into several shops for help, wishing to remain here on the chance of getting a job with a circus coming to the Town. Feeling ill he laid down in the Park at the bottom of Hanover Buildings, where I found him covered with Small Pox eruption, and at once had him removed to Hospital.

Clothing and Bedding.—All infected clothing and bedding were destroyed until we obtained our Steam Disinfector, which has acted most satisfactorily in purifying infected articles.

Disinfection.—All infected houses were thoroughly disinfected by a special staff, free of cost, immediately the patients were removed, and in cases where it was necessary, temporary food and lodging were found for persons who had to leave their homes during the disinfecting process.

Admission from other Districts.—Of the 153 Cases mentioned, 28 from outside districts were admitted for treatment at the Hospital on the request of the respective Local Authorities.

The greatest number of patients in Hospital at one time amounted to 61. The largest number on Ship being 42.

Cases admitted during the months of

January,	35.	May,	7.
February,	28.	June,	5.
March,	24.	July.	9.
April,	40.	August,	3.

September, 1. (From Cape Town).

Total 153.

In concluding this portion of my Report, I desire to tender my sincere thanks to the Medical Practitioners of the Town for the courteous and kind assistance they accorded me in my endeavours to stamp out the disease. Nor can I overlook how much is due to the willing and diligent work of the Sanitary Inspectors who, without complaint, often worked night and day without rest.

TABLE XV.

CASES OF SMALL POX admitted during the year 1893 *for isolation in West Quay Hospital.*

No.	*Name.*	*Date of Admission.*	*Date of Discharge.*	*Age.*	*Variety.*	*Residence.*	*Vaccination.*	*Remarks.*
1	W. D.	Jan. 7th.	Feb. 7th.	13	Modified.	Lansdowne Hill.	Re-vaccinated; 3 marks fair.	
2	L. D.	Jan. 7th.	Feb. 7th.	7	Modified.	Lansdowne Hill.	Primary Vaccination, 1 mark indistinct.	Contracted small pox from his cousin, who was admitted on Dec. 26, 1892, from St. George's Court. The case referred to was also the cause of Nos. 2, 3, 4, 5, and 6. The persons attacked were offered re-vaccination at their homes free, but absolutely refused, on Dec. 26, 1892, except one case, No. 3, in which re-vaccination was refused until a few days before attack.
3	R. H.	Jan. 7th.	Feb. 7th.	9	Modified.	St. George's Court.	Re-vaccinated; 3 marks good.	
4	M. P.	Jan. 8th.	Feb. 7th.	23	Modified.	St. George's Court.	Primary Vaccination, 4 marks distinct.	
5	F. C.	Jan. 8th.	Feb. 7th.	13	Semi-Confluent.	St. George's Court.	Primary Vaccination, 1 mark indistinct.	
6	S. D.	Jan. 9th.	Feb. 17th.	16	Modified.	Lansdowne Hill.	Primary Vaccination, 3 marks fair.	
7	N. P.	Jan. 10th.	Jan. 31st.	2	Very Mild.	Chantry Road.	Vaccinated in infancy, 3 marks fair.	Origin doubtful; could not be traced.
8	W. W.	Jan. 10th.	Feb. 7th.	6 m.	Modified.	Chantry Road.	Unvaccinated.	Origin doubtful.
9	C. S.	Jan. 10th.	Died Jan. 17th.	22	Severe Confluent	Chantry Road.	No signs.	Origin doubtful. Died.
10	E. S.	Jan. 10th.	Feb. 7th.	11	Very Mild.	Chantry Road.	Primary Vaccination, 1 mark slight.	Origin doubtful.
11	J. S.	Jan. 10th.	Feb. 7th.	14	Modified.	Chantry Road.	Stated to have been Vaccinated. No signs.	Origin doubtful.
12	R. D.	Jan. 12th.	Feb. 7th.	15	Modified.	Mount Street.	Primary Vaccination, 2 marks faint.	Visited at Lansdowne Hill, from which No. 1 was taken.
13	M. A. J.	Jan. 13th.	Feb. 11th.	64	Very Mild.	Itchen Ferry.	Primary only, 2 marks good.	Origin doubtful. Admitted for South Stoneham Authority.
14	H. W.	Jan. 13th.	Feb. 16th.	18	Modified.	Derby Road.	Primary Vaccination, 3 marks distinct.	Origin doubtful. Laundry work was taken in by parents.
15	A. M.	Jan. 13th.	Feb. 7th.	40	Very Mild	Craven Street.	Re-vaccinated twice, 4 marks good.	Worked at Dust Destructor. No definite origin.

TABLE XV.—Continued.

No.	*Name.*	*Date of Admission.*	*Date of Discharge.*	*Age.*	*Variety.*	*Residence.*	*Vaccination.*	*Remarks.*
16	M. H.	Jan. 14th.	Feb. 7th.	5	Modified.	Chantry Road.	Primary Vaccination, 3 marks large.	Origin doubtful.
17	F. M.	Jan. 16th.	Feb. 11th.	29	Modified.	Cranbury Place.	Primary, 3 marks distinct.	Origin from the visit of an infected person.
18	A. C.	Jan. 17th.	Died Jan. 31	28	Severe Confluent	Mount Street.	Stated to have been Vaccinated. No signs.	Origin from case admitted on Dec. 26th, 1892. Died.
19	E. B.	Jan. 17th.	Feb. 17th.	24	Modified.	Coleman Street.	Primary Vaccination, 3 marks good.	Origin doubtful.
20	A. E.	Jan. 18th.	Feb. 20th.	25	Severe Confluent.	Canal Walk.	Primary only, 4 marks good.	Origin from No. 14, who visited Canal Walk previous to admission.
21	J. F.	Jan. 21st.	Feb. 20th.	25	Very Mild.	Alfred Street, Newtown.	Primary Vaccination, 3 marks large.	Origin doubtful.
22	J. C.	Jan. 21st.	March 4th.	18	Confluent.	St. George's Court.	Primary Vaccination, 3 marks.	Origin from No. 5, brother of same.
23	G. C.	Jan. 21st.	Feb 22nd.	20	Modified.	French Street.	Primary, no signs.	Origin same as No. 22. Resided in a boys' shelter.
24	A. F.	Jan. 23rd.	Feb. 20th.	22	Very Mild.	Newtown.	Primary Vaccination, 3 marks good.	Origin doubtful.
25	G. P.	Jan. 23rd.	Feb. 18th.	26	Modified.	St. George's Court.	Primary Vaccination, 3 marks good.	Origin from wife, No. 4.
26	A. C.	Jan. 24th	Feb. 27th.	16	Modified.	Simnel Street.	Primary only, 3 marks good.	Origin doubtful. Son of a lodging-house keeper.
27	W. H.	Jan. 26th.	March 31st.	26	Modified.	Pembroke Square.	Primary, 1 mark.	Origin doubtful. Had been travelling about country; only few days in Southampton.
28	I. M.	Jan. 27th.	Feb. 24th.	27	Modified.	Cranbury Place.	Re-vaccinated 12 days previous to admission, 3 marks.	Origin from husband, No. 17.
29	H. J.	Jan. 28th.	March 30th.	40	Severe Confluent.	Sholing.	Re-vaccinated at 15 years, 6 marks visible.	Origin from No. 13, son of same. Admitted for South Stoneham Authority.
30	R. P.	Jan. 28th.	Feb. 28th.	10	Very Mild.	Westgate Street.	Primary Vaccination, 3 marks distinct.	Origin doubtful.
31	A. S.	Jan. 29th.	Mar. 3rd.	22	Modified.	South Front.	Primary Vaccination, 3 marks, distinct.	Origin doubtful.
32	C. O.	Jan. 29th.	Mar. 10th.	16	Modified.	East Street.	Primary Vaccination, 2 marks good	Origin doubtful.
33	E. W.	Jan. 30th.	Died Feb. 14	3	Severe Confluent.	Castle Street.	No marks visible.	Origin doubtful. Resides close to Hospital Died

TABLE XV.—Continued.

No.	Name.	Date of Admission.	Date of Discharge.	Age.	Variety.	Residence.	Vaccination.	Remarks.
34	E. D.	Jan. 31st.	Feb. 29th.	32	Very Mild.	French Street	Primary Vaccination, 2 marks.	Origin from No. 23.
35	W. K.	Jan. 31st.	Mar. 3rd.	23	Modified.	St. Michael's Sq.	No signs.	Tramp. Patient was a fish hawker, stated to have sold fish to infected persons.
36	C. D.	Feb. 2nd.	Mar. 1st.	28	Modified.	West Marlands.	Primary Vaccination.	Origin doubtful.
37	A. L	Feb 2nd.	Died Feb. 3	29	Severe Confluent.	Bargate Street.	No signs.	Origin supposed from No. 27.
38	W. C.	Feb. 2nd.	Mar. 2nd.	16	Modified.	Mount Street.	Primary Vaccination.	Origin from No. 18.
39	H. J.	Feb. 2nd.	Mar. 1st.	11	Very Mild.	Queen's Terrace.	Primary Vaccination.	Origin doubtful.
40	L. G.	Feb. 2nd.	April 8th.	4	Severe Confluent.	French Street.	Primary, 1 mark slight.	Origin from No. 23.
41	E. M.	Feb. 2nd.	Mar. 11th.	28	Modified.	Terminus Terrace.	Primary, 3 marks good.	Origin supposed to be over the public bar, from an infected person.
42	H. K.	Feb. 2nd.	Mar. 9th.	20	Confluent.	High Street.	Primary, 2 marks slight.	Origin doubtful.
43	F. D.	Feb. 3rd.	Mar. 10th.	40	Severe Confluent.	Blechynden Street.	Primary Vaccination.	Police constable visited St. George's Court, residence of No. 22.
44	E. S.	Feb. 3rd.	Mar. 20th.	18	Modified.	Lower Canal Walk.	Primary Vaccination, 2 marks slight.	Visited No. 18.
45	M. B.	Feb. 3rd.	Mar. 19th.	8	Modified.	Queen's Street.	Never Vaccinated.	Origin doubtful.
46	C. S.	Feb. 3rd.	Mar. 2nd.	20	Modified.	Eldon Street.	Primary Vaccination.	Origin doubtful.
47	A. C.	Feb. 4th.	Mar. 30th.	4	Very Mild	Mount Street.	Primary Vaccination, 3 marks good.	Origin from No. 18, who was Mother of patient.
48	S. H.	Feb. 4th.	Mar. 8th.	13	Modified.	Mount Street.	Primary, 2 marks distinct.	Origin, brother of No. 18, and lived with her.
49	A. B.	Feb. 4th.	Mar. 9th.	29	Modified.	Mount Pleasant.	Primary Vaccination.	Origin doubtful.
50	W. C.	Feb. 6th.	Mar. 30th.	29	Severe Confluent.	Albert Road.	Primary, and on Jan. 29th, 1893. 4 marks good.	Contracted small pox on S.S. Scot, removed to Hospital immediately on arrival in Port.
51	G. P.	Feb. 6th.	Feb. 16th.	31	Very Mild.	Shirley Road.	Primary Vaccination.	Removed from S.S. Scot convalescent.
52	A. F.	Feb. 8th.	Died Feb. 11	22	Severe Confluent.	Elm Terrace.	No signs.	Origin doubtful. Died.
53	A. E.	Feb. 12th.	Mar. 26th.	18	Semi-Confluent.	Simnel Street.	Primary Vaccination, 4 marks.	Origin from No. 35. Lodging house attendant.
54	H. L.	Feb. 13th.	Mar. 11th.	29	Modified.	French Street.	Primary.	Origin from No. 40.

TABLE XV.—Continued.

No.	*Name.*	*Date of Admission.*	*Date of Discharge.*	*Age.*	*Variety.*	*Residence.*	*Vaccination.*	*Remarks.*
55	R. B.	Feb. 13th.	Mar. 30th.	16	Confluent with complications.	Queen Street.	No primary. Vaccinated 3 days before admission.	Origin from sister No. 45.
56	W. G.	Feb. 16th.	Mar. 14th.	39	Modified.	Common lodging house, Simnel St.	Primary Vaccination, 2 marks indistinct.	Tramp. Resided at Lodging house, St. Michael's Square, with No. 35.
57	H. R.	Feb. 18th.	Mar. 30th.	43	Modified.	Northbrook Road.	Primary Vaccination, 2 marks slight.	Origin doubtful.
58	H. S.	Feb. 21st.	Mar. 25th.	21	Modified.	Rookery, Cross St.	Primary, 3 marks good.	Origin supposed to be from a hawker.
59	F. E.	Feb. 23rd.	April 8th.	19	Semi-Confluent.	Bevois Valley.	Primary Vaccination, 1 mark.	Origin from No. 49.
60	J. P.	Feb. 24th.	Mar. 25th.	21	Modified.	Ancasta Road, Bevois Valley.	Primary, 3 marks.	Origin from No. 51.
61	J. J.	Feb. 24th.	April 4th.	20	Semi-confluent	Royal Crescent.	Primary Vaccination, 3 marks good	Origin doubtful, could not be traced.
62	M. C.	Feb. 25th.	May 3rd.	27	Severe Confluent with complications	Taylor's Court, High Street.	Re-vaccinated at 12 years, 4 marks just visible.	Origin doubtful.
63	A. R.	Feb. 28th.	April 4th.	23	Modified.	Winchester Terrace	Primary Vaccination, 3 marks distinct	Origin doubtful.
64	J. C.	Mar. 3rd.	April 8th.	18	Modified.	Mount Street.	Primary Vaccination, 4 marks just visible.	Origin from No. 48.
65	C. D.	Mar. 4th.	Mar. 30th.	16	Modified.	French Street.	Primary, 3 marks large, fair.	Origin doubtful.
66	S. C.	Mar. 6th.	April 1st.	40	Modified.	Mount Street.	Primary, 3 marks good.	Origin from No. 48 & Mother of No. 64.
67	J. C.	Mar. 7th.	April 1st.	42	Semi-confluent.	Mount Street.	Primary, 1 mark large, indistinct.	Origin, Husband of No. 66.
68	E. C.	Mar. 7th.	April 1st.	9	Very Mild	Mount Street.	Primary, and on Feb. 10th, 4 distinct marks	Origin, daughter of previous case.
69	J. K.	Mar. 8th.	Apr. 29th.	45	Modified.	Casual Ward.	Primary Vaccination, 3 marks large.	Tramp. Origin doubtful.
70	C. P.	Mar. 8th.	Apr. 29th.	12	Confluent with complications.	Ancasta Road, Bevois Valley.	Primary Vaccination, no signs present.	Origin from brother of No. 60.
71	G. C.	Mar. 11th.	Died, Mar. 18th.	5	Severe Confluent.	Taylor's Court.	No marks were visible.	Contracted disease from mother, No. 62.

TABLE XV.—Continued.

No.	*Name.*	*Date of Admission.*	*Date of Discharge.*	*Age.*	*Variety.*	*Residence.*	*Vaccination.*	*Remarks.*
72	C. W.	Mar. 11th.	April 8th.	50	Modified.	Royal Crescent.	Primary 3 marks good.	Origin from daughter, No. 61.
73	A. L.	Mar. 12th.	Apr. 30th.	4	Confluent.	Common Lodging house S. Michael's Square.	Stated, primary, no marks were visible	Origin from No. 56.
74	W. L.	Mar. 14th.	May 11th.	25	Severe Confluent with complications	Cambridge Road.	Primary only, 1 mark visible.	Insurance Agent visited house of step-father at Shirley, sickness in house at the time, supposed to be measles.
75	T. F.	Mar. 15th.	Apr. 25th.	40	Semi-confluent.	Common Lodging house, West St.	Primary Vaccination, no marks visible.	Origin No. 56.
76	P. R.	Mar. 15th.	Apr. 15th.	16	Modified.	St. Mary Street.	Primary, 3 marks good.	Origin doubtful.
77	M. S.	Mar. 16th.	Apr. 24th.	70	Modified.	Queen's Rd., Freemantle.	Primary Vaccination, indistinct.	Origin supposed to have been carried by Insurance Agent. Admitted for the Shirley Board of Health.
78	E. W.	Mar. 17th.	May 11th.	10	Severe Confluent with complications	Norman's Road, Freemantle.	Primary, 2 marks indistinct.	Admitted for the Shirley Board of Health. Origin supposed to be same as No 76.
79	F. M.	Mar. 18th.	Apr. 15th.	33	Modified.	Trinity Road.	Primary Vaccination, I mark.	Insurance Agent visited same house as No. 73, during sickness.
80	W. C.	Mar. 19th.	Apr. 15th.	19	Modified.	Cromwell Road, Fitzhugh.	Primary, 2 marks.	Origin, worked with brother of No. 73. Admitted for Shirley Board.
81	E. H.	Mar. 21st.	Apr. 28th.	58	Semi-confluent.	Richmond Street.	Primary, no marks visible.	Origin doubtful.
82	E. H.	Mar. 21st.	May 11th.	21	Confluent.	Jail Street.	Primary, no signs.	Origin, visited same house at Shirley with No. 73.
83	D. H.	Mar. 25th.	Apr. 29th.	12	Modified.	Shirley Rd., Freemantle.	Primary Vaccination, no marks visible.	Origin supposed to be the same as No. 76. Admitted for Shirley Board.
84	A. M.	Mar. 28th.	Apr. 29th.	9	Severe Confluent with complications	Millbrook Road, Freemantle.	Primary, no marks visible.	Admitted for Shirley Board. Origin, same as previous cases.
85	C. S.	Mar. 29th.	Apr. 24th.	19	Modified.	French Street.	Primary 2 marks good.	Origin from No. 65.
86	G. A.	Mar. 29th.	Apr. 22nd.	20	Modified.	Ann St., Worthing	Primary Vaccination, 2 marks good.	Came from Havant by train to meet Sanger's Circus here. Found asleep in Park at 4 p.m.
87	W. C.	Mar. 30th.	May 3rd.	25	Modified.	Valley Rd., Bevois Town.	Primary Vaccination, 2 marks good.	Origin from brother-in-law, No. 79.
88	P. H	April 1st.	June 10th.	27	Confluent, with Complications.	Henry Road, Freemantle.	Primary Vaccination. No marks.	Admitted for Shirley Board. Insurance agent. Visited same house as No.

TABLE XV.—Continued.

No.	Name.	Date of Admission.	Date of Discharge.	Age.	Variety.	Residence.	Vaccination.	Remarks.
89	A. G.	April 4th.	April 29th.	18	Modified.	Payne's Road, Freemantle.	Primary, 3 marks distinct.	Origin same as other Shirley cases. Admitted for Shirley Local Board.
90	V. M.	April 7th	April 14th.	17	Mild.	Millbrook Road, Freemantle.	Primary, and on March 27th. 4 marks good.	Origin from sister, No. 84. Admitted for Shirley Local Board.
91	M. W.	April 7th.	May 17th.	6	Modified.	Poor House, St. Mary Street, Casuals.	Primary Vaccination, 2 marks good.	Origin doubtful (Casuals).
92	L. M.	April 8th.	April 29th.	16	Modified.	Millbrook Road, Freemantle.	Primary, and on March 27th. 4 marks.	Origin from sister, No. 84. Admitted for Shirley Local Board.
93	E G.	April 8th.	April 29th.	16	Modified.	Northumberland Road.	Primary, 3 marks large	Origin doubtful.
94	W. G.	April 8th.	May 11th.	10	Modified.	Northumberland Road.	Primary Vaccination, 1 mark faint.	Origin doubtful. Brother of previous case.
95	S M.	April 8th.	April 29th.	40	Modified.	Millbrook Road, Freemantle.	Primary, and on March 27. 6 marks distinct.	Origin from daughter, No. 84.
96	A. L.	April 9th.	Died April 10th.	2	Severe Confluent.	Simnel St., common Lodging-house.	No signs.	Origin doubtful. Mother had been tramping country with child. Entered Southampton from Romsey. The disease was then old.
97	R. H.	April 10th.	Died April 18th.	49	Severe Confluent.	Shirley Road, Freemantle.	No marks visible.	Origin from daughter, No. 83. Admitted for Shirley Local Board.
98	L. B.	April 10th.	May 7th.	15	Severe Confluent.	Weston Cottage, Nursling.	Primary Vaccination, no marks visible.	Admitted for Romsey Board. Origin—Patient was servant at Shirley, and was sent home sick a week previous to admission.
99	M. A. K.	April 11th.	April 29th.	45	Very Mild.	Melbourne Srreet.	Primary Vaccination, no marks visible.	Origin doubtful.
100	W. E.	April 12th.	May 11th.	24	Semi-Confluent.	Richmond Street.	Primary, 2 marks good.	Origin from No. 81.
101	E. H.	April 13th.	May 6th.	57	Modified.	James Street.	Primary, no marks visible.	Origin doubtful.
102	W. S.	April 16th.	May 26th.	39	Semi-Confluent.	Casual Ward, Poor House.	Primary Vacciuation, no marks visible.	Origin doubtful. Tramp, aduitted from Poor House.
103	J. W	April 17th.	May 17th.	3½	Modified.	Poor House, St. Mary Street.	Primary Vaccination, 2 marks good.	Origin from sister, No. 91.
104	C. C.	April 20th.	May 17th.	4	Modified.	Poor House, St. Mary Street.	Primary, 3 marks distinct.	Origin from same source as previous case.

TABLE XV.—Continued.

No.	*Name.*	*Date of Admission.*	*Date of Discharge.*	*Age.*	*Variety.*	*Residence.*	*Vaccination.*	*Remarks.*
105	L. J.	April 20th.	May 17th.	15	Modified.	Oxford Street.	Primary, and in January. 6 good marks.	Origin doubtful. Had been residing at Winchester.
106	J. T.	April 22nd.	May 17th.	25	Modified.	Shirley Road, Freemantle.	Primary Vaccination, 2 marks.	Admitted for Shirley Local Board. Origin same as previous cases.
107	H. H.	April 22nd.	May 20th.	35	Semi-Confluent.	Common Lodging-house, Simnel St	Primary, 3 marks distinct.	Origin from No. 96.
108	H. B.	April 23rd	May 20th.	17	Modified.	Common Lodging-house, Simnel St.	Primary, 3 marks good.	Origin from Lodging-house where No. 96 lived.
109	J. C.	April 24th.	May 20th.	24	Modified.	Common Lodging-house, Simnel St.	Primary, 3 marks distinct.	Origin from same source as previous cases.
110	E. H	April 24th.	May 20th	4 m.	Confluent.	Common Lodging-house, Simnel St.	Never Vaccinated.	Origin from same Lodging-house as No. 96.
111	A. C.	April 24th.	May 20th.	30	Modified.	Common Lodging-house, Simnel St.	Primary, no marks visible.	Origin same as previous case.
112	W. C.	April 25th.	June 1st.	61	Confluent.	Common Lodging-house, Simnel St.	Primary, no marks.	Origin same as previous case.
113	A. G.	April 25th.	May 20th.	57	Confluent.	Shirley Road, Shirley.	Primary, no marks visible.	Origin from No. 97. Admitted for Shirley Board.
114	G. T.	April 25th.	May 20th.	29	Modified	Common Lodging-house, Simnel St	Primary, 1 mark visible.	Origin from No. 96.
115	A. B.	April 25th.	May 23rd.	7	Modified.	Western Grove Cottage, Nursling.	Primary, 2 good marks.	Origin from sister, No. 98.
116	W. P.	April 25th.	May 20th.	20	Modified.	Western Cottage, Nursling.	Primary, 2 marks distinct.	Lodger. Origin from No. 98.
117	H. B.	Apr. 26th.	May 23rd.	4	Modified.	Western Cottage, Nursling	Primary, 2 marks visible	Same as previous case, No. 98.
118	J. B.	Apr. 26th.	June 1st.	41	Confluent.	Western Cottage, Nursling.	Primary, 2 marks	Origin from daughter, No. 98.
119	V. B.	Apr. 26th.	May 18th.	5	Modified.	Western Cottage, Nursling.	Primary, and re-vaccinated April 27th.	Origin from sister, No. 98.
120	J. S.	Apr. 27th.	May 23rd.	16	Modified.	York Street.	Primary, 1 mark.	Origin doubtful.
121	T L.	Apr. 27th.	May 23rd.	40	Modified.	Maddison Street.	Primary, 1 mark.	Origin doubtful, worked at same place as No. 25.
122	A. N.	Apr. 27th.	June 1st.	44	Confluent.	Buchan's Court, St. Michael's Square.	Primary, 3 marks	Origin doubtful Hawker slept one night at 16, Simnel Street.
123	W. E.	Apr. 28th.	June 1st.	23	Modified.	West Front.	Primary, no marks visible.	Worked in Docks with No. 112.
124	S. B	Apr. 28th.	June 1st.	42	Modified.	Simnel Street.	Primary, 2 marks	Origin from No. 110.
125	F. H	Apr. 29th.	May 23rd.	38	Modified.	Bevois Street.	Primary, 2 marks	Origin doubtful.
126	W. B.	Apr. 28th.	June 8th.	28	Confluent.	Above Bar.	Primary, 3 marks	Origin doubtful.

TABLE XV.—Continued.

No.	*Name.*	*Date of Admission.*	*Date of Discharge.*	*Age.*	*Variety.*	*Residence.*	*Vaccination.*	*Remarks.*
127	E. I.	Apr. 30th.	May 26th.	18	Modified.	Above Bar.	Primary, and re-vaccinated April 28th.	Origin from No. 126.
128	M M.	May 8th.	June 1st.	15	Modified.	Brewer's Arms, Lower Banister St	Primary, 3 marks	Origin unknown.
129	C. S.	May 15th.	June 8th.	22	Modified.	The Sceptre Inn, Romsey,	Primary, 2 marks	Origin doubtful. No. 118 visited there.
130	M. S.	May 15th.	June 16th.	38	Confluent.	The Union, Romsey.	Primary, no marks visible.	Origin doubtful.
131	E. B.	May 15th.	June 8th.	11	Modified.	Maddison Street.	Primary, 2 marks	Origin from No. 121
132	E. P.	May 17th.	June 16th.	10	Modified.	Castle Gardens.	Primary, 2 marks	Went to St. Michael's School.
133	M. M.	May 17th.	June 9th.	6	Semi-Confluent.	Bell Street	Primary, no marks visible.	Went to school with previous case.
134	W. S.	May 22nd.	June 19th.	45	Confluent.	Lodging-house, Simnel Street.	Primary, 2 marks	Went to Union, St. Mary Street, at night. Tramp.
135	J. M.	June 7th.	July 6th.	42	Modified.	Simnel St.,	Primary, no marks visible.	Tramp.
136	J. S.	June 16th.	July 27th.	52	Confluent.	Common Lodging-house. West Street	Primary, 3 marks	Origin doubtful. Tramp.
137	S. S.	June 17th.	August 3rd	19	Modified.	Casual Ward.	Primary, no marks visible.	Origin from No. 134.
138	F. D.	June 17th.	July 18th.	23	Modified.	St. Andrew's Road	Primary, 3 marks	Origin doubtful.
139	H. D.	June 29th.	July 27th.	26	Modified.	High Street.	Primary, 3 marks	Origin from their servant.
140	G. T.	July 6th.	August 7th	25	Confluent.	Godfrey Street.	Was never Vaccinated	Origin doubtful.
141	A. P.	July 7th	July 31st.	20	Modified.	Spa Road.	Primary, 2 marks	Origin doubtful. Led a suspicious life.
142	J. W.	July 13th.	August 21st	58	Confluent.	Lodging-house, Romsey.	Primary, 2 marks	Travelling pedlar; was acquainted with No. 129.
143	A. I.	July 17th.	August 14th	23	Modified.	Was admitted from s.s. Berlin.	Primaryy, 1 mark	Steward on s.s. Berlin; was ill 9 days, and admitted to Hospital on immediate arrival in port.
144	C. B.	July 27th.	August 28th	55	Semi-Confluent.	Old Portswood.	Primary, re-vaccinated, date unknown.	Origin from No. 141, who visited there.
145	W. H.	July 29th.	August 26th	30	Confluent.	Casual Ward, Poor House.	Primary, 2 marks	Resided at Young's Lodging-house, Romsey, for 3 weeks; came to Southampton July 28th, admitted to Hospital on 29th.

TABLE XV.—Continued.

No.	*Name.*	*Date of Admission.*	*Date of Discharge.*	*Age.*	*Variety.*	*Residence.*	*Vaccination.*	*Remarks.*
146	F. G.	July 30th.	Aug. 28th.	20	Semi-confluent.	Elgin Road, Freemantle.	Primary, 1 mark.	Sent in by Shirley Board. Was nursed by E. W., who was just recovering from Small pox.
147	H. W.	July 30th.	Aug. 21st.	14	Modified.	Waverley Road, Freemantle.	Primary, 4 marks.	Origin from sister, E. W.
148	H. W.	July 30th.	Aug. 21st.	17	Very Mild.	Waverley Road, Freemantle.	Primary, 3 marks	Sent in by order of Shirley Local Board. Nursed by his sister.
149	O. S.	Aug. 1st.	Aug. 28th.	34	Confiuent.	Bridge Street	Primary, 2 marks.	Origin from No. 143, having nursed that patient nine days.
150	M. W.	Aug. 14th.	Sept. 4th.	12	Very Mild.	Waverley Road, Freemantle.	Primary, 4 marks.	Origin from No. 147.
151	L. A.	Aug. 21st.	Sept. 23rd.	20	Confluent.	Jail Street.	Primary, 3 marks	Origin from a girl who worked at same shop who was supposed to be suffering from Chicken pox.
152	T. S.	Sept 15th.	Oct. 2nd	35	Semi-confluent.	Ashnorth Street, Doulton-in-Furness, Lancashire.	Primary, 2 marks	Patient was a passenger from Cape Town by S.S. Scot, and was admitted in Hospital on immediate arrival in port.

TABLE XVI.

VACCINATION RETURNS FOR TOWN PROPER.

Years.	*Births.*	*Successfully Vaccinated.*	*Died Unvaccinated.*	*Insusceptible to Vaccination.*	*Postponed and whereabouts unknown.*	*Total.*
1888	1710	1391	144	1	174	1710
1889	1660	1272	138	1	249	1660
1890	1585	1263	143	3	176	1585
1891	1714	1365	157	4	188	1714
1892	1646	1312	178	8	147	*1646

* One child had Small Pox.

TABLE XVII.

SHOWING THE NUMBER OF CASES OF INFECTIOUS DISEASES OCCURRING IN SOUTHAMPTON, AND NOTIFIED TO THE MEDICAL OFFICER OF HEALTH UNDER THE INFECTIOUS DISEASE (NOTIFICATION) ACT, 1889, FOR THE YEAR ENDING DECEMBER 31st, 1893.

Week ending.	Small Pox.	Cholera.	Diphtheria.	Membranous Croup.	Erysipelas.	Scarlatina or Scarlet Fever.	Typhus Fever.	Typhoid, Enteric, Relapsing or Continued Fevers.	Puerperal Fever.	Total.
1893										
January 7th	3	..	..	..	..	1	..	..	..	4
,, 14th	12	..	..	..	1	1	..	..	..	14
,, 21st	7	..	..	..	..	..	..	1	..	8
,, 28th	6	..	2	..	1	2	..	..	..	11
February 4th	19	..	1	..	1	3	..	2	..	26
,, 11th	3	..	1	..	..	1	..	..	..	5
,, 18th	5	..	1	..	1	2	..	3	..	12
,, 25th	5	..	1	..	4	..	..	1	..	11
March 4th	3	..	1	..	..	1	..	..	..	5
,, 11th	7	..	2	..	3	..	..	2	..	14
,, 18th	5	..	1	..	..	1	..	1	1	9
,, 25th	2	..	..	..	1	..	..	1	..	4
April 1st	3	..	..	1	..	..	..	1	..	5
,, 8th	3	..	..	..	..	1	..	..	..	4
,, 15th	5	..	1	..	4	4	..	..	..	14
,, 22nd	5	..	1	..	3	..	..	1	..	10
,, 29th	13	..	..	..	3	3	..	1	..	20
May 6th	1	..	..	..	1	2	..	4	..	8
,, 13th	2	..	..	..	1	3	..	2	..	8
,, 20th	2	..	..	..	1	5	..	5	..	13
,, 27th	1	..	..	..	2	2	..	1	.	6
June 3rd	..	..	..	..	..	3	..	7	..	10
,, 10th	1	..	1	..	3	3	..	3	..	11
,, 17th	3	..	2	..	5	4	..	1	..	15
,, 24th	..	..	1	..	3	2	..	3	..	9
July 1st	1	..	..	..	2	3	..	..	..	6
,, 8th	2	..	3	..	2	5	..	1	..	13
,, 15th	..	..	2	..	3	2	..	1	..	8
,, 22nd	1	..	1	..	2	1	..	1	..	6
,, 29th	2	..	1	..	1	5	..	1	..	10
August 5th	1	..	..	..	1	3	..	5	..	10
,, 12th	..	..	1	..	2	2	..	1	..	6
,, 19th	..	..	..	..	..	..	..	1	..	1
,, 26th	1	..	..	..	3	4	..	1	..	9
September 2nd	..	..	1	..	2	1	..	2	..	6
,, 9th	..	..	2	..	1	3	..	2	..	8
,, 16th	1	..	1	..	2	5	..	4	..	13
,, 23rd	..	..	3	1	2	..	..	2	..	8
,, 30th	..	..	1	..	1	1	..	6	..	9
October 7th	..	..	..	..	10	2	..	8	..	20
,, 14th	..	..	2	..	3	4	..	2	..	11
,, 21st	..	..	..	..	6	5	..	2	..	13
,, 28th	..	..	1	..	4	2	..	4	..	11
November 4th	..	..	2	..	1	1	..	4	1	9
,, 11th	..	..	1	..	3	1	..	3	..	8
,, 18th	..	..	2	..	4	1	..	4	..	11
,, 25th	..	..	3	..	5	1	..	3	..	12
December 2nd	..	..	1	..	4	..	..	4	1	10
,, 9th	..	..	3	..	2	..	..	2	..	7
,, 16th	..	..	1	..	3	1	..	2	..	7
,, 23rd	..	..	..	..	..	..	..	.	..	..
,, 30th	..	..	3	..	2	..	..	1	..	6
Totals	*125	..	51	2	109	97	..	107	3	494

* NOTE.—Beside the 125 cases notified, 28 other cases were admitted from outside districts for treatment.

TABLE XVIII.

CASES OF INFECTIOUS DISEASES NOTIFIED, ARRANGED ACCORDING TO AGES AND DISEASES.

DISEASES.	0 *to* 1	1 *to* 5	5 *to* 10	10 *to* 15	15 *to* 25	25 *to* 35	35 *to* 45	45 *to* 55	55 *to* 65	65 *and upwards*	*TOTAL.*
*Small Pox	2	8	8	12	44	27	13	6	5	—	125
Diphtheria	1	9	13	3	9	6	7	2	—	1	51
Membranous Croup	—	—	1	1	—	—	—	—	—	—	2
Erysipelas	4	6	6	9	13	13	17	20	11	10	109
Scarlet Fever	—	31	35	17	8	3	2	1	—	—	97
Typhoid or Enteric Fever ..	1	12	24	24	21	15	5	3	2	—	107
Puerperal Fever	—	—	—	—	1	2	—	—	—	—	3
TOTALS	8	66	87	66	96	66	44	32	18	11	494

* It is interesting to note that the larger number of cases occurred among persons between 15 and 35 years of age who would be exposed, to greater risks of infection, and are less protected by their primary infant vaccination; on the other hand it is, for similar reasons interesting to note the small number of cases under 1 year and under five.

TABLE XIX.

AGE DISTRIBUTION OF DEATHS.

The following Table shows the Death Rate of Persons at several ages during 1893. The calculations however, are based upon the enumerated Population given in the Census of 1891, and are, therefore, only approximately correct. The Census figures of 1891 have been only recently issued rendering it impossible to arrive with exactness at the number of persons living in 1893 at the ages given.

	Total.		0 to 1		1 to 5		5 to 15		15 to 25		25 to 35		35 to 45		45 to 55		55 to 65		65 to 75		75 to 85		85 to 95		95 & up.	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Population, Census 1891. ..	30926	34399	813	800	3156	3143	7261	7239	5455	6522	4557	5370	3577	3992	2821	3116	1859	2226	1080	1403	296	510	49	77	2	1
	65325		1613		6299		14500		11977		9927		7569		5937		4085		2483		806		126		3	
Deaths 1893.	704	666	163	154	85	82	32	26	30	31	35	39	57	63	75	65	84	60	79	66	53	65	10	13	1	2
	1370		317		167		58		61		74		120		140		144		145		118		23		3	
Death rate calculated on Census 1891.	20·9		196·5		26·5		4·0		5·1		7·1		15·8		23·5		35·2		58·4		146·4		182·		1000·0	

TABLE XX.

ABSTRACT FROM THE METEOROLOGICAL REGISTER KEPT AT THE ORDNANCE SURVEY OFFICE, SOUTHAMPTON, DURING THE YEAR 1893.

Month.	Barometer Corrected and Reduced to 32° at Mean Sea Level.						Temperature.									Rainfall.				Recorded Sunshine.		
	Mean at.		Maximum Reading.	Date.	Minimum Reading.	Date.	Mean at		Mean.		Approximate Mean.	Highest Maximum.	Date.	Lowest Minimum.	Date.	Total in Inches.	Greatest quantity in 24 hours.	Date.	No. of days on which 0.1 or more fell.	Total No. of hours.	Maximum No.	Date.
	9 a.m.	9 p.m.					9 a.m.	9 p.m.	Max. in Air.	Min. in Air.												
	Inches.	Inches.	Inches.		Inches		Deg.	Deg.	Deg.	Deg.	Deg.	Deg.		Deg.			Inchs.				Hours	
January ..	30.092	30.087	30.487	21	29·421	29	35.5	36.0	41.2	32.0	36.6	53.4	23	17.6	4	1.703	0 460	9	15	35.1	5.9	15
February ..	29.730	29.764	30.401	5	28.753	21	42.6	41.4	48.6	37.5	43.0	57.6	19	28.4	6	3.741	0.500	27	21	74.7	8.7	28
March ..	30.170	30.164	30.492	19	29.638	1	48.1	44.5	57.4	36.9	47.1	66.4	30	26.2	19	0.258	0.085	3	5	209.2	11.1	28
April ..	30.167	30.156	30.492	8	29.898	19	56.6	51.0	66.5	42.3	54.4	80.1	25	30.2	14	0.067	0.037	16	2	276.8	12.4	25
May ..	30.077	30 074	30.397	6	29.592	17-8	62.0	55.7	68.7	47.9	58.3	75.6	10-12	41.0	8	0.839	0.468	17	6	255.8	14.0	22
June ..	30.026	30.037	30.412	6	29.386	23	65.1	60.3	72.7	52.7	62.7	91.2	19	40.3	1	1.026	0.260	27	7	229.2	14.8	18
July ..	29.924	29.932	30.295	28	29.554	12	65.2	61.4	71.5	55.9	63.7	81.3	2	50.1	18	4.014	1.008	13	13	206.0	14.1	7
August ..	30.061	30.064	30 325	28 & 29	29.628	21	67.7	63.0	74.1	56.3	65.2	87.0	16	46.2	29	1.292	0.433	20	8	235.5	12.3	16
September	29.914	29.903	30.310	3	29.311	30	60.0	55.1	67.9	49.2	58.5	79.0	14	36.6	24	1.672	0.410	28	12	169.6	11.2	12
October ..	29.956	29.944	30.483	23	29.258	4	52.1	50.6	59.8	44.9	52.3	65.8	21	29.2	31	3.429	0.525	5	19	126.9	9.0	12
November	30.019	30.019	30.481	21	29.121	18	42.0	41.9	48.4	36.6	42.5	63 1	3	26.6	1	2.352	0.380	14	15	62.2	7.6	12
December ..	30.035	30.054	30.739	29	28.857	20	40.3	40.2	47.2	34.7	40.9	55.7	13	20.7	3	3.093	0.630	19	17	60.1	6.3	2
For the Year	30.014	30.016	30.739	Dec. 29	28.753	Feb 21	53.1	50.1	60.3	43.9	52.1	91.2	June 19	17.6	Jan 4	23.486	1.008	July 13	140	1941.1	14.8	June 18

This Return has been supplied by the courtesy of Col. Sir Charles Wilson, R.E., K.C.B.

DAIRIES, COW-SHEDS, AND MILK-SHOPS ORDERS.

Systematic and repeated inspection has been maintained throughout the year in regard to Dairies, Cow-sheds, and Milk-shops.

There are 283 milk-shops upon the Register kept by the Local Authority, compared with 126 during the previous year.

In 57 cases it was discovered that milk was being sold by unregistered persons, the majority of whom have since applied to have their names registered, in compliance with the Dairies, Cow-sheds, and Milk-shop Orders, 1885.

The object of this order is to secure the registration of all premises where milk is sold, so that due supervision may be executed by the Health Authority to maintain the cleanliness of premises and receptacles in which milk is stored, and that such precautions may be adopted as shall prevent the likelihood of milk sold to the public being contaminated. Milk is one of those articles of food which, if exposed to foul gases, the effluvia of decaying matter, or the risk of absorbing the germs of various infectious diseases, quickly deteriorates, and in the latter case it multiplies the poison absorbed.

Inasmuch as it forms the staple diet of infants, who would be less able to repel or withstand the effects of such contamination, the importance of strict supervision must commend itself to all.

Great improvements might be effected in milk stores with advantage to infantile population and the public generally if a code of Bye-Laws similar in principle to those printed in the Annual Report of 1892, and repeated herein, were adopted.

At present the supervision and inspection results in little benefit, as the Order under which the registration is made does not render the registration permissive as far as the Local Authority are concerned, but definitely states they "shall" register every person who applies to have his name placed upon the Register. Consequently, a person must be registered whether his premises are sanatorily fit or otherwise for the storage of milk. The Contagious Diseases (Animals) Act, 1886, does, however, empower the Local Authority to construct Bye-Laws for the regulation of such registered premises.

The following is a brief summary of the cases giving cause for complaint:—

Milk stored in proximity to defective drains..	9
,, ,, in filthy premises	6
,, ,, near cesspools	2
,, ,, near choked drains .. .	11
,, ,, near collections of manure ..	9
,, ,, in general shops in insanitary condition	26
,, ,, in rooms where beer is retailed..	4
Total	67

I trust the Health Authorities will consider it their duty to make Bye-Laws or Regulations for the inspection of cattle and dairies, for prescribing and regulating the lighting, ventilation, cleansing, drainage, and water supply of dairies and cow-sheds in the occupation of persons following the trade of cow-keepers or dairymen; for securing the cleanliness of milk stores, milk-shops, and milk vessels used for containing milk for sale; for prescribing the precautions to be taken by the purveyors of milk, and persons selling milk by retail, against infection or contamination. Considering the important bearing this has upon the public health, I trust you will think it advisable to formulate the necessary Regulations under the Contagious Diseases (Animals) Act, 1886, and the Dairies, Cow-sheds, and Milk-shops Order of 1885. The following is a reprint of the Regulations which are most commonly used, and I feel certain that if you adopt the course I have suggested it will meet with the approval of the Local Government Board.

CONTAGIOUS DISEASES (ANIMALS) ACT, 1886, AND THE DAIRIES, COW-SHEDS, AND MILK-SHOPS ORDER OF 1885.

For the Inspection of Cattle in Dairies. *

2. In every case where the Medical Officer of Health, the Inspector of Nuisances, or any other officer specially authorized by the Sanitary Authority in that behalf, has, for the purpose of inspection, obtained access to a dairy in pursuance of the statutory provision in that behalf, no person shall wilfully obstruct any such officer in the inspecton of the cattle therein, and the occupier of such dairy shall not, without reasonable excuse, neglect or refuse, when required by any such officer, to render him such assistance as may be reasonably necessary for the purpose of such inspection.

For prescribing and regulating the Lighting, Ventilation, Cleansing, and Water Supply of Dairies and Cow-sheds in the occupation of persons following the trade of Cow-keepers or Dairymen.

3. Every person following the trade of a cow-keeper or dairyman shall provide every dairy and cow-shed in his occupation with all necessary and proper means of lighting and ventilation, to secure the health and good condition of the cattle therein.

He shall not cause or suffer any greater number of cattle to be at any time kept in a building used as a dairy or cow-shed than will admit of the provision of (†) *cubic feet* of free air space for each cow.

He shall cause the ventilation of every building which, subsequently to the date of the coming into force of these Regulations, may be newly occupied as a dairy or cow-shed, to be, by means of a sufficient number of openings or windows in the walls on two opposite sides of the building, or in the wall on one side and in the roof, so as to afford effectual means of ventilation by direct communication with the external air.

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* The absence from this series of any Regulation authorizing inspection is accounted for by the fact that the Sanitary Authorities are given the necessary powers by S. 9 of the Contagious Diseases (Animals) Act, 1886.

(†) The Local Government Board have advised the adoption of not less than eight hundred cubic feet in respect of each cow.

Where such openings and windows are constructed so as to close, he shall, in addition, cause adequate means of constant ventilation to be provided by openings in an external wall of such dairy or cow-shed, or by some other effectual method or appliance.

4. Every person following the trade of a cow-keeper or dairyman shall, from time to time, as often as occasion may require (except in such cases as are hereinafter specified), cause the ceiling and the internal surface of every wall of any dairy or cow-shed in his occupation to be thoroughly lime-whited or coloured :—

Provided that the foregoing requirement shall not apply to any wall the internal surface of which is painted, or where the material of or with which such surface is constructed or covered is such as to render the lime-whiting or colouring thereof unsuitable and inexpedient, and so long as such surface is thoroughly cleansed.

5. Every person following the trade of a cow-keeper or dairyman shall cause every dairy and cow-shed in his occupation to be effectually drained, so that all urine and other liquid filth may be properly carried away.

He shall not cause any inlet to any drain that may be provided for the drainage of a dairy or cow-shed to be within such dairy or cow-shed.

6. Every person following the trade of a cow-keeper or dairyman shall provide for every dairy and cow-shed in his occupation an adequate water supply of good quality, and proper for the health and good condition of the cattle therein.

He shall cause every receptacle in which such water may be placed for the use of any cattle to be emptied and cleansed as often as may be necessary.

In every case where the water may be stored in a cistern or cisterns he shall cause such cistern or cisterns to be conveniently placed so as to allow of ready access, and to be properly constructed and covered so as to prevent the fouling of the water.

For securing the cleanliness of Milk-stores, Milk-shops, and of Milk-vessels used for containing Milk for sale.

7. The occupier of a milk-store or milk-shop shall, except in such cases as are hereinafter specified, from time to time cause the ceiling and the internal surface of every wall of such milk-store or milk-shop to be thoroughly lime-whited or coloured as often as occasion may require for the purpose of keeping the premises in a state of cleanliness :—

Provided that the foregoing requirement shall not apply to any wall the internal surface of which is painted, or where the material of or with which such surface is constructed or covered is such as to render the lime-whiting or colouring thereof unsuitable or inexpedient, and so long as such surface is thoroughly cleansed.

8. Every cow-keeper, dairyman, and purveyor of milk shall, on every day on which any milk-vessel may be used on his premises for the purpose of containing milk for sale, cause every such vessel to be thoroughly cleansed with clean hot water or steam immediately after it shall cease to be in use.

He shall cause every milk-vessel that may be returned to him empty to be thoroughly cleansed with hot water or steam before being used to contain any milk intended for sale either by himself or by any other person.

He shall cause every milk-vessel when not in use to be kept thoroughly clean.

For prescribing precautions to be taken by Purveyors of Milk and Persons selling Milk by retail against Infection or Contamination.

9. A purveyor of milk, or a person selling milk by retail, shall not cause any milk to be stored on his premises in any cellar or room in which there is any untrapped opening to a drain, or, either in the manner of storage or of distribution, do any act or thing likely to expose any milk to infection or contamination, or omit to do any act or thing necessary for the due protection of any milk from such infection or contamination.

10. A purveyor of milk, or person selling milk by retail, shall not use for the delivery of milk for sale to any person any can or other vessel that may have been in the possession

of any person who, he has been informed, or has reasonable grounds for believing, was at the time suffering from a dangerous infectious disorder, or any can or other vessel that may have been left at the residence of such person, until such can or vessel shall have been thoroughly disinfected and cleansed.

Penalties.

11. Every person who shall offend against any of the foregoing regulations shall be liable for every such offence to a penalty of *five pounds*, and in the case of a continuing offence to a further penalty of *forty shillings* for each day after written notice of the offence from the Sanitary Authority :—

Provided, nevertheless, that the justices or court before whom any complaint may be made or any proceedings may be taken in respect of any such offence may, if they think fit, adjudge the payment as a penalty of any sum less than the full amount of the penalty imposed by this regulation.

Commencement of the Regulations.

12. These regulations shall come into force on and after the day of , 189 .

FACTORY AND WORKSHOP ACTS.

The total number of Workshops now upon the Register amounts to 175. This includes 229 work-rooms. In the Register kept the most minute details as to lighting, ventilation, trade, number of workers, age and sex of the same, cubic capacity, sanitary conveniences, condition of premises, &c., &c., are duly entered. Records are made respecting every visit, and particulars as required are forwarded to the Factory Inspector of the district in the following form :—

[COUNTERFOIL]
REGISTER OF WORKSHOPS.

Notice to Inspector of Factories and Workshops.

Date ... ...

Name of Occupier ... ...
Address of Workshop ...
Nature of Work ... ...
No. of Women employed ...
No of Young Persons ...
No. of Children (if any) ...
Is Abstract of Factory and Workshop Acts, 1878 to 1891, exhibited in Workshop? ...
Were there any Sanitary Defects?

BOROUGH OF SOUTHAMPTON.

Health Department,
Town Hall,
Southampton,
189

Dear Sir,

The following facts have come under my notice during the week ending

I am, Yours truly,

Medical Officer of Health.

To H.M. Inspector of Factories, Southampton.

Register of Workshops.

Name of Occupier ... ...
Address of Workshop ...
Nature of Work ... ...
No. of Women employed ...
No. of Young Persons ...
No. of Children (if any) ...
Sanitary defects have been found and notices served for immediately remedying same ...
Is Abstract of Factory and Workshop Acts, 1878 to 1891, exhibited in Workshop? ...

The inspections under these Acts have greatly increased, and my personal visits are frequently requisitioned.

The following is a summary of the year's work :—

Number of inspections made	382
Cases of overcrowding dealt with	28
Work-rooms in a dirty and unhealthy state	20
Defective drainage	2
General insanitary condition	7
Number of reports sent to District Factory Inspector	142

Overcrowding.—In one case where dressmaking was carried on, 10 workers were found in a room which allowed them only (*) 137 cubic feet of air space per individual, and was lighted by three gas burners. The number of workers was reduced to five.

One other case worth quoting is that in which three men were found engaged in tailoring in a room practically giving only the space of a cupboard. Each man had but 57 cubic feet of air space.

Drainage.—In one instance a network of drains from several houses was found under a work-room. The drains were composed chiefly of unglazed field pipes with open joints. The whole ground in the immediate vicinity was contaminated with sewage. This was remedied by removing and reconstructing the whole system, embedding same in concrete, and by replacing the soiled ground by fresh earth.

Bye-Laws.—During the year two important sets of Bye-Laws—namely, those relating to Common Lodging-houses and Houses let in Lodgings—have been approved by the Local Authority, and will, I hope, soon receive the confirmation of the Local Government Board.

The Platform Outlet.—I had the honour of bringing before you in a Special Report some criticisms and suggestions in regard to a nuisance occurring in connection with the system of drainage in connection with the Platform Outlet towards the close of the year. As the matter is still under consideration I content myself with this brief allusion, to this matter, hoping to give a further Report at an early date.

(*) The Act specifies not less than 250 cubic feet per adult.

PART III.

GENERAL SANITARY WORK.

GENERAL SANITARY WORK

Conducted through the Health Department in 1893.

Sale of Food and Drugs Act.—The following is a list of samples which have been collected and submitted to the Borough Analyst:—

Milk	59	*Lard*	11
Butter	27	*Vinegar*	6
Spirits	8	*Olive Oil*	2
Coffee	26	*Arrowroot*	2
Lemonade	1	*Drugs*	3

Showing a total of 145 samples, 16, or 11 per cent., of which were found to be adulterated, resulting in 14 convictions, one withdrawal, and one dismissal.

Unsound Food. — 217 boxes of Bloaters, 3cwt. of Haddocks, 60 boxes of Kippers, 6cwt. of Codfish, 40 dozen Escalops, 11 barrels of Herrings, 458 Eggs, 21 Rabbits, 54 Pheasants, 54 gallons of Milk, 110lbs. of Beef, and 64lbs. of Plums were condemned as unfit for food of man, and destroyed by a Magistrate's Order in each case.

Meat inspection is regularly kept up, not only during the day, but also during those evenings of the week when there is the greatest likelihood of unsound food being offered to the public.

Slaughter-houses.—This Borough contains 37 private slaughter-houses, to which 1,489 visits have been paid by the Sanitary Inspectors.

Common Lodging-houses.—The Register contains 12 of these houses, which have received as many as 3,713 visits—2,620 during the day, and 1,093 at night time. The necessity for this extraordinary number of visits arose principally during the period of the year when Small Pox was prevalent in our town, such supervision, as before stated, proving most valuable in reducing considerably the risk of tramps spreading the disease.

Nuisances.—During the year, 4,026 nuisances were reported by the Sanitary Inspectors and the public. 2023 of these were abated by formal notice, 2003 were complied with by verbal notice only, showing that the public are becoming more alive to the necessity of Public Health Measures, and that they have a desire to act upon the advice of the Health Authority.

Drain Testing.—Applications from householders to have their drains tested are greatly increasing in number. Out of 441 suspected drains tested, 378 were found seriously defective. This is perhaps the most convenient place to offer a suggestion for the improvement of house drainage.

Under our existing system all building applications are accompanied by plans, and submitted to the Borough Surveyor. I am moreover informed that only in rare instances is the drainage system shown on these plans, which do not come under my Department. The want of systematic supervision in regard to houses at the time of building is, in my opinion, the cause of much subsequent mischief and danger to the inhabitants, besides causing the owners great expense (which might have been saved) to make alterations necessary to comply with modern requirements.

I have already stated that out of 441 drains tested, 378 were found defective. These do not include the cases in which the house drains were so badly constructed or dilapidated that the smoke test was unnecessary for the discovery of any imperfections.

The following figures must show even more forcibly the result of the want of proper supervision when the drains are first constructed. During the year, 1,586 drains were found imperfect. This total is made up as follows:—

Drains repaired or freed after choking ..	1129
Defective and untrapped drains trapped	402
Old drains abolished or reconstructed; new drains laid . ..	55

Disconnection of House Drains from Sewers.—Until the last two or three years house-drains were allowed to communicate directly with the public sewers without any intercepting trap—neither has it been the custom to ventilate the system of house drainage. When one considers that the condition of the sewers in some parts of the town forms what is virtually a cesspool without sufficient ventilation, it will be seen that any decomposition and consequent tension of gas in the sewers would easily permit the air of such sewer to find its way into the houses. In one large district, the drainage of which discharges at the Belvidere outlet, this danger is most pronounced; the sewers there have a bad fall, and are tide-locked for many hours, allowing decomposition of the contained sewage, also a silting up of the sewer. The tide rising in such sewers mechanically forces the sewer gas into the house-drains and too often into the houses themselves, through defective construction. I therefore advise you in the interests of the inhabitants, and also in the interests of house owners, to make a beginning to minimise the risks of these dangers in the future by adopting the necessary measures to secure:

1.—That all plans for buildings intended for occupation shall contain a plan of the proposed drainage system of such houses.

2.—The plan should show all details, including:—
   - (a) The disconnection by intercepting trap from Town sewers.
   - (b) Size and fall of drain.
   - (c) Course of house drain.
   - (d) Ventilation inlet and outlet.
   - (e) Discharge of sink waste, bath waste, etc.
   - (f) Arrangement of water closets.

3.—Such system of drainage to be approved by the Health Committee.

4.—Before the drainage of any NEW house be covered, a Certificate should be given by the Medical Officer of Health's Department, that the work has been carried out satisfactorily.

Specimen Plans.—It would be useful for the guidance of builders if specimen plans showing these requirements were provided by the Local Authority, and be open to inspection during office hours. These plans should show alternative systems suitable for various houses, and the section and elevation for detached or semi-detached and contiguous houses. I should be pleased to assist in preparing such plans as I have here suggested.

Building Plans.—During 1893, 162 Building Plans were submitted to the Works Committee for confirmation, 14 being rejected. These figures show that it would be quite possible to carry out the above proposals without much trouble or inconvenience to builders.

Bath and Sink Wastes.—In addition to the figures given above, 227 waste-pipes from baths and kitchen sinks were discovered untrapped, and in direct communication with the drains. These were improved by disconnection, and were made to empty over a yard gully trap.

Soil Pipes.—Many soil pipes are placed inside houses, and in twenty instances were found seriously defective. These were replaced by outside soil pipes.

Water-Closets.—Three hundred water-closets have been refitted, in many instances replacing the old D trap and container with sanitary closets. Leaden D traps were frequently found to be perforated, this defect charging the house with sewer gas in many instances.

In two cases illustrations were obtained of the ingenuity of the workmen when there is trouble to obtain the required trap. Two closets of the old long hopper type were connected to the soil pipe by a flower-pot, the bottom of which was knocked out, and the space between the spiggot of the pan and the pot was filled with clay, the whole arrangement being boxed in by the dangerous wood front and seat, hiding all defects, and in these cases allowing sewage to lay upon the floor unseen for years.

The other example of bad work was discovered on exposing the drainage of a block of thirteen houses, where pipes of all diameters, from 4in. to 12in., were used, the space between them not being dealt with at all. In the middle of the course of this drain an earthenware barrel-shaped utensil was interposed, the bottom of which had been removed. No attempt had been made to secure the joints.

In one case, in another district, under a living-room, we found that branch drains, for the want of a proper junction, were connected by meat tins. It will be no surprise to know that the neighbouring ground was saturated with sewage. I have preserved samples of these and many other drainage curiosities which show not only the carelessness of the plumber and labourer of the past, but also their inhumanity.

Flushing Appliances.—611 closets were found deficient of water for flushing purposes. While dealing with this subject, I desire to express my opinion that the quantity now allowed, viz., two gallons, for these purposes, especially for modern flush-down closets, is insufficient, and should be increased to at least three gallons, in order to thoroughly drive the excreta past the syphon trap.

Removal of Ashes.—During the year, 378 complaints have been received in regard to the removal of Ashes, which were referred to the Borough Surveyor's Department.

Urinals.—I desire to call the attention of the Town Council to the urgent necessity which exists for improvement in this direction. Southampton is very badly off in this respect, and as a consequence nuisances are committed in all narrow lanes and courts leading off main thoroughfares. Several of the old form of urinals similar to the one in the Back of the Walls, and Bridge Street should be removed, and underground urinals and closets erected at various parts of the Town where a number of streets meet.

A few Cases of unusually Bad Drainage in houses, discovered and remedied.

Situation.	Folio.	State of Drainage.	Remarks.
High Street	1	Drain exposed; found constructed entirely of unglazed field pipes, with open joints, connected with sewer. Sewage escaped freely all round drain joints, open several inches.	Sewer gas entered premises. Dead well, full of sewage was also found.
Orchard Lane (2 houses)	19	Sewer gas freely entered the house; examination showed drains constructed similar to above.	The whole system was reconstructed.
Cumberland Place	28	Similar construction, open joints, porous field pipes, and escape of sewer gas into house.	Ditto.
Belmont Terrace, Portswood	32	Similar construction. Porous field pipes. Open joints. Many of the pipes were smashed in.	Ditto.
Oxford Street (5 houses)	31	In a similar state.	Ditto.
John Street	88	Two dead wells were discovered, 6 feet deep, under house, full of sewage. The entire drainage of the house was made to flow into these dead wells. The overflow was conducted by means of field pipes, without joints to sewer. The whole place was permeated with sewer gas.	The whole of the drainage was reconstructed and the wells and neighbouring earth, which had been soaked with sewage removed
John Street	88	Houses in similar condition with the exception of dead wells.	Drains reconstructed.
Trinity Cottages, North Front		Houses in similar condition, the leaking sewage permeating under the adjoining house. Notice to remedy this evil was not complied with until a magistrate's order was obtained.	The drainage was reconstructed.

Without taking up further space to prevent repetition, exactly similar conditions to the above occurred, and were remedied in the following instances:—Middle Portland

Terrace, Royal Crescent, Terminus Terrace, nine houses in Latimer Street, the drains of the whole number being reconstructed.

Latimer Street.—It was in this street that it was found that the Town sewer was a large brick sewer with inadequate fall, and silted as much as 18 inches, and 2 feet in places, taking weeks to clear.

Defective brick house drains were removed from houses in Cranbury Place and Alma Road. Field pipes with open joints drained a common lodging house, in West Street.

Bridge Road.—Three houses were drained by field pipes, having leaking open joints.

St. Luke's National Schools.—In consequence of three cases of diphtheria occurring among the scholars the whole of the drainage system was exposed and examined. Sewer gas escaped freely into the school. A 12-inch drain passed under the school room, discharging into a blind catchpit in the front area. This drain was constructed of porous field pipes with open joints, and in places uncovered by earth, and situated a few inches only below the schoolroom floor. Eleven branch drains were found defective and badly constructed. The school was closed, and the drainage system was replanned in the early part of the year, and since that time no cases of infectious disease have been notified.

Lower Canal Walk. — The houses on the N.W. side drain into an old brick sewer, which was opened for its entire length, and upon examination showed general dilapidations. In some parts the sewer crown had fallen in. The cement between the bricks had disappeared permitting the free flow of sewage into the neighbouring ground through the spaces between the bricks. The sewer had also a considerable amount of deposit and silt, while the flow of its contents was further obstructed by the partial blocking of its terminal end.

Thirteen houses, situated in Wharf Street, were found badly drained, and an entirely new system was carried out.

SUMMARY.

The following is a Summary of routine work which has received the attention of the Health Department during the year 1893.

Nuisances reported by the Inspectors	4026
,, ,, at the office and abated by notice	2023
Ditto by verbal notice	2003
Drains tested with the Smoke test	441
Found defective or untrapped	378
Letters sent for non-compliance with notices	210
Water fittings found defective and reported to the Water Works Engineer	204
Structural defects reported to Borough Surveyor	84
Drains cleansed and repaired	1129
,, ,, re-trapped	402
,, ,, re-constructed	12
Old drains abolished and new drains provided	55
Bath, Lavatory, and slop stone waste pipes disconnected from drains, and made to discharge over open gully traps	227
Soil pipes (in door) abolished and new soil pipes fixed on outside of Houses and ventilated	20
New pans fixed to closets	300
Cesspools and catchpits abolished	73
Dead Wells cleansed at Highfield	2
Water Closets re-constructed	13
,, externally ventilated	12
,, urinals and back yards, re-limewashed	230
Soil pipes ventilated	32
Urinals re-constructed	9
Water laid on to closets for flushing	611
Yards repaved or repaired	143
Sanitary dust bins provided to houses in lieu of ash heaps	54
Houses cleansed and whitewashed	238
Cellars and Areas re-limewashed	15
Roofs of houses repaired	36
Stack pipes and gutters under houses fixed or repaired	74

Overcrowding of Houses—numbers reduced	15
Manure and offensive matter removed	259
Animals kept in a dirty state	29
Smoke nuisances abated	5
Old cisterns used for storage of drinking water abolished and water laid on to the houses direct from Town main	5
Water drawn from a tap for drinking, which flushed a urinal—New supply provided	1
Dead well abolished in a cellar	1
Broken slop stone sinks removed, and new sinks substituted	12
Intercepting traps fixed to house drains, with fresh air inlets, and ventilated	19
Marine Stores re-limewashed	2
Lavatory basins fixed at a common lodging house	3

APPENDIX.

EXPENDITURE RE SMALL POX, 1893.

This expenditure was entirely unforseen, and therefore could not be included in the estimate made for the year 1893, as submitted to the Sanitary Authority. It explains in a very large degree the increase about which so much criticism has been heard, regarding the increase in the Sanitary Rate.

Some items of particular interest are here set forth, showing the expensive character of hurried preparation :—

EXTRA ACCOMMODATION.	£	s.	d.
The Hire, Mooring, Fitting, &c., of S.S. Morglay	603	15	0
Mansbridge Cottages, Fittings, &c., Removing Iron Hospital, with necessary Fittings, &c., Erection of Laundry, West Quay Hospital	363	1	0
Compensation for bedding destroyed (at that time being without steam disinfector)	226	5	0
Maintenance of Patients, including Stimulants, Food, and Medicines for 152 patients	458	0	0
Cost of extra Nursing Staff and Attendants	544	0	0
Extra Furniture, Bedding, &c.	389	0	0

These figures have been prepared from the expenditure January to December, 1893.